

May 25, 2000

Mr. J. B. Allen, Plant Manager
Westinghouse Electric Corporation LLC
Nuclear Fuel Business Unit
Drawer R
Columbia, SC 29250

SUBJECT: NRC INSPECTION REPORT 70-1151/2000-202

Dear Mr. Allen:

This letter refers to the fire and chemical safety inspection performed by the Headquarters and Region II staff of the U.S. Nuclear Regulatory Commission (NRC) on May 1-4, 2000, at your facility in Columbia, South Carolina. The purpose of the inspection was to determine whether activities authorized by your license were conducted safely and in accordance with the NRC requirements. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed report.

Areas reviewed during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of facility walk throughs, selective examinations of procedures and records, interviews with personnel, and observations. Based on the results of this inspection, no violations of NRC requirements were identified.

In accordance with the NRC's "Rules of Practices," a copy of this letter and its enclosure will be made publically available. Should you have any questions concerning this inspection, you may contact me at (301) 415-7156.

Sincerely,

/RA/

Philip Ting, Chief
Operations Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Docket 70-1151

Enclosure: Inspection Report No. 70-1151/2000-202

cc w/enclosure: Don Goldbach, Manager, Regulatory Affairs

Max Batavia, P.E., Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control

Mr. J. B. Allen, Plant Manager
 Westinghouse Electric Corporation
 Commercial Nuclear Fuel Division
 Drawer R
 Columbia, SC 29250

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OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Inspection Report No.: 70-1151/2000-202
Docket No.: 70-1151
License No.: SNM-1107
Facility Name: Westinghouse Electric Corporation
Columbia Fuel Fabrication Facility
Observations at: Columbia, SC
Inspection Conducted: May 1-4, 2000
Inspectors: C. Drummond, Chemical Safety Inspector, NRC Headquarters
P. Lee, Fire Safety Inspector, NRC Headquarters
W. Tobin, Senior Fuel Facility Inspector, Region II
Approved by: Philip Ting, Chief
Operations Branch
Division of Fuel Cycle Safety
and Safeguards, NMSS

Enclosure

EXECUTIVE SUMMARY

WESTINGHOUSE ELECTRIC CORPORATION
COLUMBIA FUEL FABRICATION FACILITY
NRC INSPECTION REPORT 70-1151/2000-202

The U.S. Nuclear Regulatory Commission (NRC) performed a routine, announced chemical and fire safety inspection at the Columbia Nuclear Fuel Fabrication Facility, Columbia SC, on May 1-4, 2000. The plant production operations were ongoing during the time of the NRC inspection.

The fire safety inspection focused on the implementation of the Columbia Fuel Fabrication Facility fire protection program commitments concerning safe plant operations. Major fire safety performance areas reviewed included maintaining design bases of engineered fire protection systems, assurance of availability and reliability of fire protection systems and process safety equipment, the adequacy of control of combustibles and hot-work activities, and capabilities for manual fire suppression response. The major chemical safety areas reviewed were standard operating procedures, maintenance and inspection, and incident investigation.

Results and Conclusions

Fire Safety

- The licensee had adequately maintained plant conditions within the original design bases of automatic sprinkler systems and fire barrier systems and has limited combustible loading below the levels that could result in a significant fire that could challenge performance of engineered protection systems.
- The preventive maintenance established for key fire protection systems and process equipment was adequately implemented to ensure availability and reliability for the performance of their intended fire safety functions. A weakness was identified in the lack of periodic internal examination of plant water storage tanks in accordance with the industry standard.
- Combustibles were adequately controlled within the process building to minimize potential fire severity and fire propagation. Combustibles were adequately controlled to minimize potential exposure fire hazards to the main process building, uranium hexafluoride cylinders, the chemical bulk storage farm, and hydrogen and hydrofluoric acid storage tanks.
- The plant's hot-work permit system for minimizing potential ignition sources and preventing fires was adequately implemented in accordance with plant procedures.
- The licensee had provided, through the combination of an onsite emergency response team and offsite fire department assistance, reasonable assurance of an adequate emergency response for suppression of a major fire at the plant.

Chemical Safety

- The licensee's standard operating procedures, in respect to the Ammonium Diuranate and Uranium Recovery processes, were adequate for safe operations.
- The licensee implemented the maintenance of the safety significant controls in a timely manner with no backlog. The operators were knowledgeable about the active engineered controls in their respective areas.
- The licensee tracked and addressed injury and abnormal performance incidents in a timely manner to prevent reoccurrence.

REPORT DETAILS

Fire Safety

1. Engineered Fire Protection Systems

a. Scope

The inspectors reviewed and evaluated plant conditions to ensure that they were within the design bases and/or the performance capabilities of engineered fire protection systems. The inspectors performed a walkdown inspection of systems, interviewed plant employees, and reviewed documentation related to the scope of this inspection.

b. Observations and Findings

The inspectors performed a walkdown inspection of sprinkler-protected areas (i.e., warehouse, maintenance shop, waste incinerator, solvent extraction, compressor and hot oil room) to ensure that plant conditions were within the original design bases of automatic sprinkler suppression systems. The inspectors noted that the potential fire hazards under the sprinkler-protected areas were within their design bases and would not challenge the effectiveness or the capability of automatic sprinkler systems to contain or suppress a fire. The inspectors also determined that the plant water supply systems were adequate and reliable for meeting automatic sprinkler systems and manual fire suppression requirements.

The inspectors also performed walkdown inspections of process areas that were adjacent to sprinkler-protected areas (e.g., ammonium diuranate (ADU) conversion, powder blending, ADU pelleting, rod and final assembly, etc.). The as-found combustible loading within these areas was maintained at levels that minimized the potential for a significant fire, which could propagate into the sprinkler-protected areas and challenge the performance capabilities of existing automatic sprinkler systems. Also, the transient combustibles within the compressor and hot oil room and the waste incinerator room were minimal and were within the performance capability of fire barriers engineered to contain a fire.

c. Conclusion

The licensee had adequately maintained plant conditions within the original design bases of automatic sprinkler systems and fire barrier systems and had limited combustible loading below the levels that could result in a significant fire that could challenge performance of engineered protection systems.

2. Availability and Reliability of Process Safety and Fire Protection Equipment

a. Scope

The inspectors performed walkdown inspections, interviewed plant personnel, and examined licensee records and procedures for preventive maintenance (PM) of key fire

protection and process safety equipment. The appropriate PM, including calibration and functional testing, ensures the availability and reliability of fire protection and process equipment to perform its intended safety functions.

b. Observations and Findings

Process Equipment Important to Safety

On the basis of random samples of the licensee's PM records and walkdown examinations of process equipment, the inspectors determined that the overall PM for the following key process safety equipment (e.g., flame sensors, thermocouples, temperature controllers, pressure switches, or automatic gas shut-off valves) and testing of safety interlock functions (e.g., automatic shut-off of hydrogen or natural gas supply, shut-down of electric power, or initiation of a nitrogen purge) were performed in accordance with plant procedures:

- calciner No. 2 and No. 4
- sintering furnaces No. 1 through 4
- hot oil systems No. 3 and No. 4
- waste incinerator

The licensee had performed calibration of equipment to ensure accuracy of process setpoints for initiating safety interlocks. The inspectors noted no obvious deficiencies in the material condition of selected process equipment examined during walkdown inspections. Process equipment was available to minimize the potential fire or explosion hazards associated with the operation of processes.

Fire Protection Systems and Equipment

The inspectors randomly sampled the licensee's PM records, walkdown inspections, and observed functional tests for selected fire protection systems and equipment. The inspectors determined that the overall PM for the following fire protection systems or equipment was performed in accordance with plant procedures to ensure availability and reliability:

- plant fire alarm system
- heat and smoke detectors
- manual fire alarm pull stations
- automatic sprinkler systems
- fire hose houses and monitor nozzles
- fire hydrants and control valves
- plant fire pumps
- water storage tanks
- fire barriers, fire doors, and fire dampers
- fire extinguishers (including Met-L-X and 150-pound dry portable extinguishers)

Accompanied by the licensee, the inspectors randomly chose several pieces of the fire protection equipment for operability testing (i.e., a manual pull station, sprinkler flow switches, fire alarm indicating devices). The inspectors also selected two high-noise

locations (i.e., the incinerator room and the penthouse) to verify audibility of the plant fire alarm system. The specific alarm locations and descriptions of fire alarm initiating devices (i.e., manual pull stations, sprinkler flow alarms, and smoke detectors) were received and documented at the plant's main fire alarm control panel. The fire alarm could be heard at the inspector-selected locations and throughout the main process areas. The inspectors noted no obvious deficiencies in the material conditions during walkdown inspections or concerns about the functional tests of selected equipment.

However, the inspectors found that the licensee had not included all applicable industry requirements (i.e., National Fire Protection Association (NFPA) 25) in the PM for the plant's water storage tanks. The requirement to periodically examine (i.e., every 5 years) the internal condition of water storage tanks to ensure detection (and correction) of potential conditions adverse to the reliability and availability of the water supply had not been incorporated into the plant PM program. The plant water storage tank No. 1 was installed in 1968, followed by water storage tank No. 2 in 1987. The licensee last examined water storage tank No. 1 in 1991. The licensee found and documented no concerns related to corrosion or buildup of sediment within the tank that could affect reliability of the plant water supply for fire protection. The licensee attributed the lack of corrosion to the cathodic protection system maintained to minimize corrosion and the availability of fully treated portable water supplied by the City of Columbia. The licensee indicated that applicable PM in accordance with NFPA 25 would be incorporated into the plant's PM program. The licensee planned to complete PM for the plant water storage tank Nos. 1 and 2 within 90 days of May 4, 2000. On the basis of interviews and review of available documentation from the licensee's inspection of water storage tank No. 1, the availability of corrosion protection and the quality of water, and the availability of two water storage tanks, the inspectors determined that the reliability of the water supply for fire protection was not significantly reduced. The licensee's plan of action was considered acceptable.

c. Conclusion

The PM established for key fire protection systems and process equipment was adequately implemented to ensure availability and reliability for the performance of their intended fire safety functions. A weakness was identified in the lack of periodic internal examination of plant water storage tanks in accordance with the industry standard.

3. Control of Combustibles and Hot-Work Activities

a. Scope

The inspectors reviewed the licensee's control of combustibles and hot-work activities for minimizing the occurrence, severity, and spread of a fire in the process areas and selected plant areas. The inspectors walked through the process and plant areas, interviewed plant employees, and reviewed documentation for the areas identified in the scope of the inspection.

b. Observations and Findings**Control of Combustibles Within the Process Building**

The inspectors examined combustibles throughout the plant process areas (e.g., ADU conversion, integrated dry route (IDR) conversion, powder blending, ADU pelleting, rods, final assembly, UF₆ cylinder washing, uranium recovery and recycling system (URRS), dissolver and scrap processing, solvent extraction, fuel assembly storage) and observed that they were adequately controlled. Flammable gases used for manufacturing processes were piped in from outside. Flammable and combustible liquids were appropriately stored using storage cabinet suitable for flammable liquids. The amount of combustible material noted during the inspectors' walkthrough was generally below that required to cause a fire that could lead to a flashover (i.e., ignition of all combustibles) in the process building.

The inspectors noted that the licensee's practice established for loading final fuel assemblies for shipment minimized the introduction of a vehicle containing fuel inside the process building. The inspectors also observed that the Type B transportation containers for shipment of fuel assemblies were of noncombustible material and minimized the potential of ignition and contribution in the event of a fire.

The inspectors also performed a walkthrough inspection of process areas no longer in use (i.e., manufacturing automation project) and noted that the licensee had provided appropriate isolation of flammable gases and electrical power to equipment. The combustibles in the areas were kept to a minimum with no significant accumulations, thus minimizing the potential for a severe fire. The smoke detectors within the abandoned process areas were maintained operable to detect a fire.

Control of Combustibles Outside the Process Building and Plant Area

The inspectors performed walkdown inspections of plant areas surrounding the process building. The inspectors noted that the areas surrounding the process building were kept free of a significant amount of combustibles that could present a fire exposure hazard.

The inspectors also reviewed the control of combustibles to minimize the potential fire exposure hazards to radiological or hazardous chemical material (i.e., UF₆ cylinders, the chemical bulk storage farm, and the hydrogen and hydrofluoric acid (HF) storage tanks). The inspectors found that the control of combustibles was adequate to minimize potential fire exposure hazards in the plant areas examined.

Control of Hot-Work Activities

The licensee had established a permit system to minimize the potential of a fire resulting from hot-work (e.g., cutting, welding, etc.) activities. The inspectors reviewed records for hot work permits for the past 5 months and interviewed plant employees authorized to issue hot-work permits. No hot-work activities were underway during the inspection for observation. As a result, the inspectors also reviewed two insurer audits of the facility operations and overall risk from 1999. The insurer reported favorably on the licensee oversight of hot-work activities, along with the integration of fire safety into plant operations. The inspectors determined that hot-work permits were issued in accordance with plant

procedures and the individuals issuing the hot-work permits were knowledgeable of procedure requirements.

c. Conclusion

Combustibles were adequately controlled within the process buildings to minimize potential fire severity and fire propagation. Combustibles were adequately controlled to minimize potential exposure fire hazards to the main process building, UF₆ cylinders, the chemical bulk storage farm, and hydrogen and HF storage tanks. The plant's hot-work permit system for minimizing potential ignition sources and preventing fires was implemented in accordance with plant procedures.

4. Manual Fire Suppression Response

a. Scope

The inspectors reviewed the availability and staffing of the onsite emergency response team (ERT) to respond to a fire. The inspectors also reviewed formal agreements for off-site fire department assistance and pre-fire plans in the event of a fire. The inspectors interviewed plant employees and reviewed documentation related to the scope of the inspection.

b. Observations and Findings

Emergency Response Team

The licensee had established an onsite ERT for responding to small fires and relied on off-site fire departments to assist in major firefighting operations. At the time of the inspection, the ERT had a total of 61 members, 40 of whom had completed and maintained the required training to be designated as fully qualified. The licensee maintained 12 to 14 ERT members on each shift to initially respond to a fire.

The inspectors noted that annual training of the ERT members was provided during the recent plant shutdown, and the training addressed fire ground operations, search and rescue, hazardous material decontamination, the use of fire extinguishers and self-contained breathing apparatus, and emergency plans. An emergency drill consisting of a simulated compressed gas cylinder leak was also performed during the annual training. The licensee had provided training commensurate with the expected performance of the ERT.

Off-site Fire Department Assistance

Mutual Aid and the Letter of Agreement: The inspectors reviewed mutual aid and the letter of agreement between the licensee and the City of Columbia Fire Department and the Richland County Department of Emergency Services, respectively, and noted that formal agreements for off-site emergency response assistance were maintained.

Pre-Fire Plans: The inspectors reviewed the Pre-Fire Plans for a fire at the plant. The inspectors noted that the plans contained information identifying the presence of radioactive, fire, and chemical hazards; location of safety equipment; building construction and support features; a detailed layout of the facility; and nuclear criticality safety concerns.

The inspectors noted that the Pre-Fire Plans appeared to be user friendly and contained emergency response data needed for firefighting operations. Following the plant shutdown, two days of training, which included familiarization with radiological, chemical, and fire hazards; available firefighting equipment at the plant; and the plant's pre-fire plans, was provided to members of the off-site fire departments.

Expected Response Time: The licensee indicated that the response time from the notification of the nearest offsite fire department until arrival of firefighting vehicles and firefighters at the plant's gate was within 10 - 12 minutes. The inspectors determined that the response time of the offsite fire departments would be reasonable for mitigating a major fire at the plant.

c. Conclusion

The licensee had provided, through the combination of an onsite ERT and offsite fire department assistance, reasonable assurance of an adequate emergency response for suppression of a major fire at the plant.

Chemical Safety

5. Standard Operating Procedures (88058)

a. Inspection Scope

The standard operating procedures (SOPs) were reviewed to verify accessibility and use by field operators to ensure that operations involving the processing, handling, and storage of licensed material were conducted safely.

b. Observations and Findings

License Application Chapter 7, Chemical Safety, addresses the chemical safety program requirements. Among the program elements is a requirement to address the operating procedures.

The inspectors selected SOPs from the ADU and Uranium Recovery areas to ensure pertinent process safety information and phases of the operation were adequately addressed. The inspectors reviewed the following chemical operating procedures (COP): ADU Precipitation (COP-810501, Rev. 26, 10-07-99), Handling, Processing, and Disposing Low Level Recovery System (COP-831001, Rev. 32, 04-02-00), and Ammonia Recovery (COP-830404, Rev. 9, 09-30-99). The SOPs reviewed contained the appropriate information required for safe operations. The SOPs contained the pertinent elements for operation: safety, startup, normal operation, temporary operations, and shutdown. The licensee currently has an outside consultant making improvements to the SOPs for the facility. It was a self-imposed enhancement to strengthen human factors within the SOPs.

The inspectors walked down the ADU and Uranium Recovery processes and interviewed responsible process operators in the respective areas. The operators had access to computerized SOPs and hard copies in the control room when needed. The inspectors selected portions of the SOPs with the operators. The SOPs appeared to be easily understood by the operators. The operators were aware of the chemical safety

requirements and risks involved in their respective process areas. The inspectors concluded the established procedures provided a reasonable assurance for safety.

c. Conclusion

The inspectors concluded the SOPs, relative to the ADU and Uranium Recovery processes, were adequate for safe operations.

6. Maintenance and Inspection (88062)

a. Inspection Scope

The maintenance and inspection program was reviewed to determine whether appropriate functional testing and preventive maintenance was being conducted to assure the availability and reliability of safety-related controls.

b. Observations and Findings

License Application Chapter 7, Chemical Safety, addresses the chemical safety program requirements. Among the program elements is a requirement to address preventative maintenance.

The inspectors reviewed the licensee's maintenance and inspection program. The safety significant interlock frequency and testing was established by an approved procedure. The regulatory engineer approved the frequency. The licensee utilized a computerized maintenance tracking system that generates work orders and notifies the responsible process areas of their safety significant controls maintenance schedule.

The inspectors selected safety significant controls in the Uranium Recovery and the ADU processes to ensure availability and reliability. The licensee identified the safety significant controls for the respective areas in the Chemical Operating Procedure Sketch, URRS area (Sketch no. 836038-1, Rev. 4, April 27, 2000) and the Safety Significant Interlocks, Alarms and Passive Engineered Controls Verification form, Conversion Line 2 (Form no. CF-81-933, Rev. 26, March 9, 2000).

The licensee identified ten AECs, six administrative controls, and one passive engineered control for the URRS areas. The AECs consisted of functions that prevent: failure of the incinerator scrubber system; solution entry to the process scrubber system, and overcharging with the waterglass drum cake. (Waterglass drum cake is the solid left over from the uranium recovery process). The periodic functional testing was verified for the AECs after review of the maintenance records. The inspectors reviewed the results of the functional testing. The results reviewed had no failures and were conducted within the allotted schedule. The licensee explained that if a safety significant control failed it was kept out of service until it was functional. After maintenance was completed, the control was tested to ensure operability.

The maintenance of the safety significant controls for the Precipitation area was also reviewed. One safety significant control was identified. The interlock was a differential pressure orifice plate flow transmitter that prevented very corrosive and soluble uranium-bearing material from entrance to specified tanks. The control was identified as a criticality

control that undergoes annual functional testing. The maintenance records reviewed indicated the control had received periodic functional testing.

No maintenance backlog existed for safety significant items at the time of the inspection. The status of maintenance items were reviewed on a weekly frequency by facility personnel to prevent backlog.

The inspectors walked down the process areas and verified that AECs were available in the Uranium Recovery and Precipitation areas. The respective operators were able to identify the AECs in their area. The inspectors also verified the administrative controls were utilized. The operators had an understanding of the importance and functions of the safety significant controls.

c. Conclusion

The licensee had performed the preventative maintenance of the safety significant controls with no maintenance backlog. The operators were knowledgeable about the AECs in their respective areas. The licensee's maintenance program was maintained to ensure safe operations.

7. Incident Investigation (88065)

a. Inspection Scope

The inspectors reviewed the safety-related performance incidents to determine whether problems with significant safety controls were being identified, evaluated and corrected in a timely manner.

b. Observations and Findings

License Application Chapter 7, Chemical Safety, addresses the chemical safety program requirements. Among the program elements is a requirement to address incident investigation.

The inspectors reviewed the licensee's incident investigation program that utilized the "Redbook" system. The Redbook was a record of unusual occurrence reports. The inspectors followed-up on a Redbook item that identified a shortage of full face respirators in the chemical area (Date of report: February 24, 2000). The licensee utilizes cartridge respirators that require a new respirator after removal. The licensee had a backlog in the cleaning of the respirators due to the number of respirators being utilized on this specific day for maintenance activities. The licensee's corrective action consisted of purchasing an additional 400 respirators and use of a backup washing machine. The inspectors reviewed the site emergency plan to ensure the licensee was prepared to respond to an emergency situation with the proper breathing apparatus. The inspectors verified the self contained breathing apparatus were accessible and in the locations identified in the emergency plan. The inspectors concluded the licensee properly addressed this issue to prevent reoccurrence and to ensure safe process activities.

In the review of the licensee's Records of Occupational Injury or Illness, the inspectors recognized a trend of nitric acid burns in the chemical area. The inspectors discussed the

observation with licensee management and determined that the licensee had self-identified this trend. Most instances reflected the affected personnel were not wearing the appropriate personal protective equipment (PPE). Some of the chemical operations/activities did not require an acid suit to be worn in activities within the vicinity of nitric acid. The licensee conducted team meetings with the plant staff to be aware of such activities. At the time of the inspection, a meeting was to take place to include in the revised SOPs the requirement of additional PPE in such activities involving nitric acid. The inspectors concluded the licensee addressed the trend appropriately.

c. Conclusion

The licensee appropriately tracked and addressed injury and performance incidents in a timely manner to prevent reoccurrence.

8. Inspection Followup Items

IFI 70-1151/99-02-01: This inspection followup item (IFI) addressed the licensee's implementation of actions to provide emergency lighting in the vibration investigation pressure drop experimental research (VIPER) pump room. At the time of the inspection, the access to the VIPER pump room was limited for reasons of personnel safety because of operation of high-pressure equipment. The licensee indicated that the electrical work to provide emergency lighting was completed on June 11, 1999, and the operability of the lights was tested during the recent plant shutdown. The inspectors reviewed the licensee documentation for the closure of this IFI. No further concerns were identified; therefore, this IFI was closed.

IFI 70-1151/99-02-02: This IFI was related to the completion of corrective actions to remove the accumulation of plastic combustibles (scrap computer equipment) in the dry powder storage area and the licensee's determination of additional required actions to prevent recurrence. The licensee completed work to clean, survey, and remove the accumulated scrap computers and parts from the dry powder storage area on June 23, 1999. Additional training was provided to operations personnel regarding appropriate housekeeping requirements. The inspectors revisited the south-east expansion storage area and noted that the control of combustibles was adequate, and there was no accumulation of significant combustibles throughout the area. No further concerns were identified; therefore, this IFI was closed.

IFI 70-1151/99-02-03: This IFI concerns the need to perform flow tests of fire monitor nozzles and the incorporation of the requirement into the plant PM program. The licensee established an annual PM requirement for performing testing of fire monitor nozzles. The annual test in accordance with the established PM procedure was completed on May 24, 1999. The flow, pressure and estimated stream distances of the monitor nozzles were recorded (e.g., 332-347 gpm., 90 psi, 150-190 ft). The total flow of approximately 1373 gpm was available for a fire or hazardous material emergency response operations. No further concerns were identified; therefore, this IFI was closed.

9. Exit Meeting Summary

The inspectors communicated observations and findings to the licensee throughout the inspection and presented the final results to licensee management during an exit meeting on May 4, 2000. The licensee acknowledged the findings presented and committed to address them as discussed in the inspection report.

PARTIAL LISTING OF PERSONS CONTACTED

Westinghouse Electric Corporation

*J. Allen	Columbia Plant Manager
*J. Bush	Manufacturing, Manager
*O. Connelly	Nuclear Criticality Safety Engineer
*H. Doctor	Maintenance Team Manager
*R. Fischer	Senior Engineer
*T. Gamble	Maintenance Planner
*W. Goodwin	Environmental, Health and Safety
*D. Goldbach	Environmental, Health and Safety, Manager
*J. Heath	Integrated Safety Engineering, Manager
*J. Hooper	Senior Integrated Safety, Engineer
*B. Monley	Columbia Plant Deputy Manager
R. Moore	Maintenance Planner
A. Parker	Maintenance Program Coordinator
*C. Perkins	Maintenance, Manager
*T. Ross	Transportation, Manager
*M. Ruhl	Maintenance Planning Team Manager
T. Shannon	Health Physics Team Manager
R. Williams	Environmental, Health and Safety Engineer

U.S. Nuclear Regulatory Commission

*C. Drummond	Chemical Safety Inspector, NRC Headquarters
*W. Gloersen	Senior Fuel Facility Inspector, Region II
*P. Lee	Fire Safety Inspector, NRC Headquarters
*W. Tobin	Senior Fuel Facility Inspector, Region II

* Attended exit meeting on May 4, 2000

INSPECTION PROCEDURE USED

IP 88055	Fire Protection
IP 88058	Standard Operating Procedures
IP 88062	Maintenance and Inspection
IP 88065	Incident Investigation

LIST OF ITEMS OPENED, CLOSED, OR DISCUSSEDItems Opened or Discussed

None

Items Closed

- | | |
|----------------------|---|
| IFI 70-1151/99-02-01 | The implementation of actions to provide emergency lighting in the VIPER pump room |
| IFI 70-1151/99-02-02 | The completion of corrective actions to remove the accumulation of plastic combustibles (scrap computer equipment) in the dry powder storage area and the licensee's determination of additional required actions to prevent recurrence |
| IFI 70-1151/99-02-03 | The conduct of the flow test and the incorporation of the required frequency of testing of fire monitor nozzles into the plant's PM program |

LIST OF ACRONYMS USED

ADU	Ammonium Diuranate
AEC	Active Engineered Control
COP	Chemical Operating Procedure
ERT	Plant Emergency Response Team
HF	Hydrofluoric Acid
IFI	Inspection Followup Item
NFPA	National Fire Protection Association
NRC	Nuclear Regulatory Commission
PM	Preventive Maintenance
PPE	Personal Protective Equipment
SOP	Standard Operating Procedure
UF ₆	Uranium Hexafluoride
URRS	Uranium Recovery and Recycling System
VIPER	Vibration Investigation Pressure Experimental Research