

R2/843
8/25/00

REGION II FUEL FACILITIES BRANCH INSPECTION PLAN

Revision Date: March 2, 2000

Inspection of: Westinghouse on August 21-25, 2000 Inspection Report Number: 70-1151/2000-005
Licensee _____ Dates (From → To) _____Total on site hours anticipated by all inspectors: 72 Total back-shift hours anticipated by all inspectors: _____

TYPE		TIMING		FOLLOW UP		NOTIFICATION		REPORT	
X	Routine		Back Shift		Allegations (Plan attached)		Announced		Integrated
	Special	X	Normal Shift	X	Events (Event Evaluation Attached)	X	Unannounced	X	Non-integrated
	Team		Both Shifts	X	Open Items (List Attached)				

Lead Inspector: David Ayres Accompanying Inspector(s): Sheryl BurrowsLicensee Contact: Don Goldbach 803-647-3586
Name Telephone NumberMotel: Sleep Inn - Columbia, SC 803-776-6263
Name and Location Telephone Number

Refer to the Targeting Information found at G:\SCHEDULE\00TARGETrev1.wpd for information on inspection emphasis for each functional area during the fiscal year. On the reverse side of this form (Region II Fuel Facilities Branch Inspection Areas), highlight the areas (e.g. F1.05, S2.07, etc.) to be inspected and cross out those areas previously inspected during the Fiscal Year DAA.
Inspector's Initials

Refer to the Targeting Information also for information on planned expenditures by inspection procedure number, and the current resource expenditures (completed hours) which are maintained by the Project Inspectors for data on year to date hours charged by inspection procedure number. This information together with the planned expenditures by procedure number should be entered on the reverse side of this form. DAA. Note: This is critical to assuring that we are appropriately controlling budgeted resources.
Inspector's Initials

Print, review, and attach a copy of the Plant Issues Matrix (for the period since the last LPR or one year which ever is longer) associated with the Primary Inspection Areas (Safety Operations, Safeguards, Radiological Controls, and/or Facility Support) in which inspection will be conducted. The purpose of the PIM review is to identify trends, strengths, and weaknesses in licensee performance in the general areas to be inspected and to provide insights to appropriately focus the inspection focus. In an attachment, list the performance measures that will be inspected and indicate the standard against which performance will be judged. Note that this part of the plan is the most important because here is where the real focus of the inspection is developed. It needs to be consistent with the Targeting Information unless performance has changed. In that case the Targeting Information must be revised _____.
Inspector's Initials

Attach a list of all open items for the facility and annotate the issues that will be reviewed for closure. The lists are in the G:\OPENITEM drive and are of the form NFSOIL2000.wpd. Note: This is critical to meeting commitments to the Regional Administrator. Check with the Project Inspector to see if there are items opened by other inspectors that should be ready for closure. If there are such items, bring back information for the inspector who opened the item to review in the office for closure. That inspector will provide you with a closure writeup to include in your inspection report. If there are items for which closure has been documented in an inspection report but are not reflected as such on the list, fill out a closure sheet and provide it to Janice Kirby DAA.
Inspector's Initials

The inspection is on the MIS in ADAMS (See Main Library and folder /Region II/Fuel Facilities/FFB Schedule/FY00 Inspection Schedule). DAA. Note: This is critical in meeting Region II Operating Plan goals. If this inspection is not on the Inspector's Initials above schedule, it is not on the Master Inspection Schedule maintained by NMSS. To add the inspection to the FFB schedule, it must be concurred in by the Project Inspector and approved by the branch chief.

Inspection Instructions from the Project Inspector (Ayres for General Electric and Westinghouse; Gloersen for NFS; and Seymour for BWX Technologies and Framatome Cogema Fuels):

Project Inspector Certification that: 1) inspection focus is consistent with branch targeting information and licensee performance trends from an up-to-date PIM, 2) planned inspection is based on acceptable performance measures, and 3) direct inspection effort to be expended during this inspection is consistent with the inspection effort goals established in the current branch targeting information, the latest LPR and resource already expended during the fiscal year. _____
Project Inspector's Initials Date

71-14

Additional Inspection Instructions from Branch Chief:

Original to Branch Secretary Copies	
With Attachments To	
	Inspector(s)
	Project Inspector
	Branch Chief

Branch Chief Approval: _____
Signature Date

G:\PLANS\INSPECTI.PLA

Region II Fuel Facilities Branch Inspection Areas**I. SAFETY OPERATIONS****O3 Plant Operations (88020)**Planned Hours: 70 Completed Hours: 49.5 Hours This Inspection: 21

- ~~O3.01 Conduct of Operations~~
- ~~O3.02 Facility Modifications and Configuration Controls~~
- ~~O3.03 Implementation of Process Safety Controls~~
- O3.04 Implementation of Storage Safety Controls
- O3.05 Implementation of Safety Controls for Material Handling and Movement
- O3.06 Housekeeping
- ~~O3.07 Review of Previous Events~~
- ~~O3.08 Follow up on Previously Identified Issues~~

O4 Fire Safety (88055)Planned Hours: 28 Completed Hours: _____ Hours This Inspection: _____

- O4.01 Fire Protection Program Management/Organization
- O4.02 Review of Documentation Related to the Fire Protection Program, Insurer's Audits and Safety Committee
- O4.03 Building Design, Construction, and Ventilation System
- O4.04 Fire Safety of Processes, Equipment, and Storage Areas
- O4.05 Fire Protection Systems
- O4.06 Fire Hazards Analysis
- O4.07 Pre-Fire Plan
- O4.08 Fire Brigade Training
- O4.09 Fire Emergency Drills
- O4.10 Off Site Support
- O4.11 Follow up on Previously Identified Issues

O5 Management Organization & Controls (88005)Planned Hours: 14 Completed Hours: 14.5 Hours This Inspection: _____

- ~~O5.01 Organizational Structure~~
- O5.02 Procedure Controls
- ~~O5.03 Internal Reviews and Audits~~
- O5.04 Safety Committees
- ~~O5.05 Quality Assurance Programs~~
- O5.06 Follow up on Previously Identified Issues

II. SAFEGUARDS**S2 Security (81000 series)**Planned Hours: 0 Completed Hours: _____ Hours This Inspection: _____

- S2.01 Management, Staffing, Plan and Procedures, Audit
- S2.02 Barriers, Locks, Equipment, Hardware, Maintenance
- S2.03 Alarm Stations Functions, Compensatory Measures, Power Supplies
- S2.04 Access Controls
- S2.05 Fitness For Duty, 10 CFR Part 26
- S2.06 Training/Qualification Appendix B, Contingency Appendix C, Tac-Exercises
- S2.07 Records, Reports, Event Logs Part 73.71
- S2.08 Shipments
- S2.09 Protection of Information, Parts 25 and 95
- S2.10 Follow up on Previously Identified issues

III. RADIOLOGICAL CONTROLS**R1 Radiation Protection (83822)**Planned Hours: 44 Completed Hours: _____ Hours This Inspection: _____

- R1.01 Radiation Protection Program Implementation
- R1.02 Radiation Protection Program Procedures
- R1.03 Radiation Protection Program Equipment
- R1.04 External Exposure Control
- R1.05 Internal Exposure Control
- R1.06 Respiratory Protection
- R1.07 Postings, Labeling, Control
- R1.08 Surveys
- R1.09 Notifications and Reports
- R1.10 Implementation of ALARA Program
- R1.11 Management Oversight of Program
- R1.12 Follow up on Previously Identified Issues

R2 Environmental Protection (88045 and 88104)Planned Hours: 16 Completed Hours: 18 Hours This Inspection: _____

- R2.01 Monitoring Program Implementation
- R2.02 Monitoring Program Results
- R2.03 Management Audits, Inspections and Controls
- R2.04 Quality Control of Analytical Measurements
- R2.05 Independent Measurement Verification (Sample Splitting)
- R2.06 Monitoring Program Reports
- R2.07 Decommissioning Activities
- R2.08 Follow up on Previously Identified Issues

R3 Waste Management (84850, 84900 and 88035)Planned Hours: 24 Completed Hours: 20 Hours This Inspection: _____

- R3.01 Liquid Effluent Program Controls, Procedures and Instrumentation
- R3.02 Liquid Effluent Monitoring Results
- R3.03 Airborne Effluent Controls, Procedures and Instrumentation
- R3.04 Airborne Effluent Monitoring Results
- R3.05 On-site Waste Storage
- R3.06 Waste Classification
- R3.07 Waste Form and Characterization
- R3.08 Waste Shipping (Manifests, Labeling, and Surveys)
- R3.09 Tracking of Waste Shipments
- R3.10 Management Control of Liquid & Airborne Effluents and Solid Waste
- R3.11 Quality Assurance Programs
- R3.12 Follow up on Previously Identified Issues

R4 Transportation (86740)Planned Hours: 24 Completed Hours: 4 Hours This Inspection: _____

- R4.01 Preparation of Packages for Shipment
- R4.02 Delivery of Completed Packages to Carriers
- R4.03 Receipt of Packages
- R4.04 Certificates of Compliance
- R4.05 Management Controls
- R4.06 Records and Reports
- R4.07 Follow up on Previously Identified Issues

IV. FACILITY SUPPORT**F1 Maintenance/Surveillance (88025)**Planned Hours: 26 Completed Hours: 20 Hours This Inspection: 6

- F1.01 Conduct of Maintenance
- F1.02 Work Control Procedures
- F1.03 Work Control Authorizations
- F1.04 Qualifications of Maintenance Personnel
- F1.05 Management Audit of Maintenance
- F1.06 Surveillance Testing
- F1.07 Calibrations of Equipment
- F1.08 Follow up on Previously Identified Issues

F2 Training (88010)Planned Hours: 18 Completed Hours: 8.5 Hours This Inspection: 9

- F2.01 10 CFR 19.12 Training
- F2.02 General Nuclear Criticality Safety Training
- F2.03 General Radiological Safety Training
- F2.04 General Emergency Training
- F2.05 Operating Procedure Training
- F2.06 On-the-job Training

F2.07 Follow up on Previously Identified Issues**F3 Emergency Preparedness (88050)**Planned Hours: 48 Completed Hours: _____ Hours This Inspection: _____

- F3.01 Review of Program Changes
- F3.02 Implementing Procedures
- F3.03 Training and Staffing of Emergency Organization
- F3.04 Off site Support
- F3.05 Drills and Exercises
- F3.06 Emergency Equipment and Facilities
- F3.07 Follow up on Previously Identified Issues

Below is an excerpt from my inspection plan that discusses the various areas to be inspected. I thought it would be good for us to look closely at all of the controls on the ADU process (converting UF6 to UO2 powder). This system has a large number of criticality and radiological safety controls, particularly administrative controls, that should be reviewed.

Inspection Plan 2000-005

O3 Plant Operations

- O3.01 Conduct of Operations - Verify that operations are being performed per approved procedures and posted instructions. Concentrate on ADU operations.
- O3.02 Facility Modifications and Configuration Controls - Verify that modifications to the ADU operations have been properly reviewed, approved, and documented. Review plant drawings and verify that they are consistent with the plant configuration.
- O3.03 Implementation of Process Safety Controls - Verify that controls identified in the safety analyses for ADU processing are being implemented in plant operations, particularly administrative controls in operating procedures.
- O3.06 Housekeeping - Verify that housekeeping is adequate to provide for route of emergency egress and to minimize fire hazards.
- O3.07 Review of Previous Events - Review the licensee's investigation and corrective actions in response to Event #37189 concerning inadequate procedure for handling contaminated HEPA filters.
- O3.08 Follow up on Previously Identified Issues - Follow progress on addressing IFI 99-06-01 concerning potential disabling of UN tank concentration monitoring system and IFI 00-02-01 concerning monitoring excessive ventilation in glove boxes.

F1 Maintenance/Surveillance

- F1.06 Surveillance Testing - Verify surveillance testing of engineered safety controls in the ADU process area are being adequately performed.
- F1.07 Calibrations of Equipment - Verify calibrations of equipment to measure safety parameters in the ADU process area are properly calibrated at an adequate frequency.
- F1.08 Follow up on Previously Identified Issues - Verify that corrective actions associated with VIO 00-02-02 concerning inadequate configuration management of the uranyl nitrate piping system have been completed.

F2 Training

- F2.01 10 CFR 19.12 Training - Verify that general employee training meets 10 CFR 19.12 requirements.
- F2.02 General Nuclear Criticality Safety Training - Verify that general nuclear criticality safety training meets license requirements.

Excerpts from G:\SCHEDULE\00TARGETrev1.wpd

E. Management Controls (88005)

- Westinghouse (Estimated FY 2000 level: 14 hours)

De-emphasize computerized procedure system but keep an eye open for hard copies of procedures that are out of date. Emphasize timely root cause evaluations by licensee and implementation of corrective actions. Also to be emphasized are: management controls over non-routine work and development of procedures and policies to assure management expectations are being met. Maintenance of documents under the document control system has been a problem in the past and should be reviewed.

F. Operations Review (88020)

- Westinghouse (Estimated FY 2000 level: 70 hours)

The program emphasis should be on the implementation of safety controls on a plant-wide basis. Particular attention should be given to the robustness of control implementation. We have seen indications that administrative controls are not always included in approved operating procedures and operators are not always trained on the implementation of those controls. In addition, attention should be directed to areas where geometry controls are used. There have been indications that the development of the Criticality Safety Evaluations have not always involved a review of source evaluations resulting in the belief that geometries were favorable when they were not. ISAs should be used to the maximum extent possible.

T. Operator Training (88010)

- Westinghouse (Estimated FY 2000 level: 18 hours)

Emphasis on training associated with new or non-routine work. Also, the 10 CFR 19.12 training was not found to be impressive. Emphasis on training of operators where such operators have served as safety controls. The licensee has not excelled in this area in the past.

U. Maintenance/Surveillance (88025)

- Westinghouse (Estimated FY 2000 level: 26 hours)

Emphasis on maintenance and surveillance of safety related controls. This has been particularly troublesome for the licensee in the past. Also, emphasis on assuring that controls requiring surveillance and testing are entered in the MAPCON.

DAVID AYRES BI-WEEKLY OPERATIONS STATUS REPORT

Don Goldbach, Manager
Environment, Health & Safety

Thursday July 27, 2000

UNUSUAL INCIDENTS

UPDATE: We have two uranyl nitrate tanks contaminated with Gadolinium. The source was old archive pellets which were disposed of. Half of one tank was converted to UO_2 before the contamination was detected. The uranyl nitrate and UO_2 powder will be blended off with non-contaminated nitrate and UO_2 powder, respectively.

UPDATE: Three pellet operators were put on restriction due to high airborne at the Pellet Line 3 roll hood. The source of the contamination was the changeout of the granulator screen during that shift. The operators involved were relatively new and were retrained on proper methods for handling this work.

UPDATE: On February 25th, a notification was made to the NRC in accordance with 10CFR70.50(b)(1) due to contamination on a concrete pad outside the plant on the south side (behind the UF6 Bay wall). All of the 162 sections were "released". The pad is to be sealed and this effort will be complete.

A 24 hour notification was made to NRC Operations Center on July 26, 2000 as a result of the discovery that a "filter processing procedure was not written in accordance with the Criticality Safety Evaluation." A copy of the report was also made to Region II and to Headquarters. The Incident Review Committee has discussed this incident and although there was no loss of double contingency protection, this event has been determined to be safety significant and a root cause is being scheduled.

On July 27, 2000, two operators were lifting a fully loaded bulk container when it suddenly fell. An experienced operator was in the process of training a new operator to do this task. The bulk container is lifted by using a device called a "strongback" which allows the overhead crane to lift the container from the floor to the platform above. The experienced operator was operating the overhead crane. He had positioned the operator in training on the platform above in order to "spot" the container on the platform station. The operator raised the full container from the floor and when it had been lifted approximately 8-10 feet from the floor, the "strongback" separated from the crane hook and the container fell to the floor. No injuries occurred. This incident has also been reviewed by the Incident Review Committee and has been determined to be safety significant. Additional actions are being taken prior to allowing restart of the bulk blending area to ensure employee safety. A root cause will be conducted to learn more from this incident and lessons learned will be applied in other areas of the plant, where applicable.