UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
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SEP 15 1992

MEMORANDUM FOR: Region III Files, Docket No. 70-36

THRU: Roy J. Caniano, Acting Chief, Nuclear Materials Safety Branch

FROM: George M. France, III, Fuel Facilities Inspector

SUBJECT: TRIP REPORT-SEPTEMBER 03, 1992, MEETING AT CE HEMATITE WITH LICENSEE, NMSS AND REGION III; CONCERNING IMPLEMENTATION OF NEW 10 CFR 20 AT COMBUSTION ENGINEERING HEMATITE OPERATIONS; FOLLOWED BY MEETING WITH CONCERNED CITIZEN

On September 3, 1992, representatives of NMSS, Region III, and the licensee's staff met at CE Hematite to discuss implementation of new 10 CFR 20, following a recent study entitled "Practical Considerations Involved in Correcting Uranium Aerosol Exposures for Particle Size in an Occupational Setting," prepared by Mr. William Radcliffe, Region III. In addition to discussing new Part 20 implementation, the NRC staff toured the facility and met separately with Mrs. Martha Dodson, a concerned citizen. Messrs. Eskridge, Grossman, and Rode represented the licensee. Ms. Keegan, and Messrs. Tokar and Soong represented NMSS, while Messrs. Axelson, Caniano, France, and Radcliffe represented Region III.

Mr. Grossman escorted the NRC staff on a tour of the fuel rod building and identified the location that was being prepared for the Kardex unit, a steel rack designed for automating the storage and retrieval of UO_2 pellets. Mr. Grossman discussed the importance of the Kardex unit and identified the location being prepared in the new plant. The Kardex unit is a UO_2 pellet storage rack or system-loads by rubber belted conveyor-which can transport and store 55 trays. Each tray can hold about 225 lbs of UO_2 pellets. Grossman indicated that the concrete foundation for the new facility was designed in accordance with the area seismic code, and the overall structure should withstand winds of 100 miles per hour.

Region III will review specifications and observe installation of the Kardex unit which is scheduled to be installed during the September 14-25, time frame. The licensee also provided a copy of a tentative agenda for installation of other safety related equipment (attached).

During introductions, Mr. Rode stated he had recently toured various fuel facilities in Russia and provided a summary of the conditions (especially health and safety) he observed in those facilities. According to Mr. Rode, his purpose for the visit was to assess the feasibility of a joint venture between CE's parent company ABB, and the Russian affiliate.

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Mr. Axelson, Deputy Director, DRSS, Region III, led the discussion concerning the aerosol classification project. Mr. Axelson clarified/itemized the following points that the licensee must adhere to, in order to comply with new 10 CFR Part 20.

Coordinate through NMSS licensing project manager for using the aerosol classification project for basis of sample data.

Continue to make particle measurements throughout the oxide plant, equip workers with lapel samplers, and consider using radiation work permits for special tasks.

Follow Reg Guide 8.25, Air Sampling in the Work Place.

Eliminate the large correction factor required in using Whatman filter paper and improve the efficiency of collecting air sample data by changing to membrane type filters.

Use cascade impactors as the primary instrument for collecting air samples.

Mr. Eskridge, Manager, Nuclear Licensing & Safety, and Accountability, for CE Hematite operations indicated that CE would evaluate the aforementioned areas. In fact, CE's prepared list for improving airborne sampling already included some of Mr. Axelson's discussions. Mr. Eskridge listed the following changes and recommendations to improve airborne sampling, while reducing radiological dose to workers in the work place:

Replace all old HEPA housings and equip for DOP testing.

Move all filter housings indoors.

Hire a health physics specialist to calculate TEDI'S.

Purchase cascade impactors.

Reduce contamination levels inside the press enclosures.

Increase use of full face respirators.

Utilize gauntlets when working inside containment.

Provide personalized coveralls.

Maintain specific records when respirators are used.

Use BZ's 100 % of the time in conversion building.

Additionally, Mr. Eskridge indicated that training was initiated to improve response to airborne alarms, building exhaust stacks were redirected to allow emissions from a main stack, and a new control room was designed to improve ventilation during normal operations.

All parties agreed that the licensee should conduct a background review and describe the program methodology of planned procedures to improve the efficiency of airborne sampling and dose assessment, and submit their findings as a separate change to the license. The amendment application should address QC practices, facility modifications, take credit for the Radcliffe study as a basis for sample data, and describe how work permits or job travelers are utilized. Meanwhile, Mr. Soong, NMSS agreed to talk with Dr. Stephen A. McQuire, Office of Nuclear Regulatory Research, NRC, about the basis for using the Radcliffe study.

Region III inspectors will inspect the licensee's program against Reg Guide 8.25.

After the onsite meeting and tour of the fuel rod building, Ms. Keegan, and Messrs. Axelson and France traveled about 7 miles to the nearby community of Crystal City, MO, and met with Mrs. Martha Dodson and her son William Dodson. The meeting took place in the Dodson home. The purpose of the meeting was to provide Mrs. Dodson with information about the fuel rod expansion program, the effect that CE Hematite operations has on the environment, to demonstrate a cooperative effort between NRC and Mrs. Dodson and the concerned citizenry that she represents, and an attempt to allay any misinformation that she may have about CE Hematite operations.

Mr. Axelson took the lead during our discussion with Mrs. Dodson and her son. While it may not be prudent to assess whether or not our mission was accomplished, it is noteworthy to mention that we did address all of her concerns. Mrs. Dodson was both attentive and generous in welcoming our presence. She also felt good that Mr. James Rode continues to be the mainstay of CE Hematite operations.

Mrs. Dodson indicated that a recent article indicated that the parent company of CE Hematite, ABB of Sweden, is actively pursuing business in Russia (in jest, wanting to take over Europe). Mr. Axelson mentioned that Mr. Rode just recently returned from Russia, where he visited several nuclear fuel manufacturing facilities. Russian representatives were scheduled to visit Hematite operations on Friday, September 04, 1992. There was no indication as to precisely the nature of the business, or to whether a business venture would involve Hematite operations. This is the second Region III based fuel facility that has mentioned potential business with the Russians. The Plant Manager of Allied-Signal, Inc., Mr. Matthew Kosmider announced that during the week of July 20, 1992, representatives of Allied-Signal, Inc. were to meet with Commissioner Selin and discuss certain ramifications of going with another US based company as a joint venture to investigate business opportunities in Russia. In response, Mr. Kosmider indicated that his

engineering staff had reviewed some documents concerning the decommissioning of nuclear systems.

In closing the meeting, we agreed to provide the following documents for Mrs. Dodson's files:

- Environmental Impact Statement/Environmental Assessment
- NRC reports on unplanned releases
- NRC inspection reports (semi-annual or annual)
  It was decided to provide Mrs. Dodson with inspection reports dated December 1990 thru March 1992
- Radiological Emergency Response Plan
- License amendment application for fuel rod plant expansion
- NUREG-1324 Proposed Method for Regulating Major Materials Licensees (generally referred to as the Haughney report)
- NUREG-1450 Potential Criticality Accident at the General Electric Nuclear Fuel and Component Manufacturing Facility, May 29, 1991

We also informed Mrs. Dodson that the decision has been made to set up a local public document room (LPDR) for the Combustion Engineering, Inc. facility in Hematite, MO. Subsequently, we learned that a letter dated September 3, 1992, was mailed to Mrs. Dodson confirming approval of the (LPDR) and enclosing a copy of the Federal Register notice. It is now open for appropriate libraries to respond, to address the rating factors and show interest in maintaining the document collection, as submitted under Docket No. 70-36.

George M. France, III
Fuel Facilities Inspector

Attachment: As stated

cc w/attachment
M. Tokar, NMSS
S. Soong, NMSS

Safety System Installations in New Assembly Building

The following are scheduled dates for safety system installation activities. Actual dates may differ somewhat; Hal Eskridge will inform Region III, 7-10 days ahead of actuals.

Scheduled Date		Activity	Status
August	8/15-20	Conduits placed in slab	Complete
	8/28	Kardex Received	Complete
September	9/14-25	Install UO_2 Pellet Storage/Retrieval	Actual Date
	9/17-30	Install major HEPA ducts	Scheduled Date
	"	Install wall conduits	"
	"	Pull Wires	"
	9/28	Begin Slab pour	"
October	10/19-31	Activate fire alarms	Scheduled Date
November	11/15-30	Install Warehouse Sprinklers	Scheduled Date
December by	12/24	Begin installation of HEPA drops, pumps and filters	Scheduled Date
January	1/4-22	Test HEPA systems	Scheduled Date
	"	Install criticality alarms	"
	"	Activate and test remaining alarms	"