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**EXECUTIVE SUMMARY**

Nuclear Fuel Services, Inc.  
NRC Inspection Report 70-143/2007-001

This inspection included observations conducted by the Resident Inspectors during normal and off-normal shifts in the area of Plant Operations and Post Strike Recovery Activities. In addition to the resident inspectors efforts, specialized inspections and reviews of documentation were conducted by regional inspectors in the areas of Safety Operations, Fire Protection, Facility Support and Radiation Protection Program.

Plant Operations

- All of the operations activities observed were performed safely and in accordance with approved procedures (Paragraph 2.a).
- The licensee had an in-line monitor failure in the BLEU Preparation Facility (BPF) discard line on January 11, 2007. The licensee and vendor are evaluating the issue for a Part 21 reportability evaluation (Paragraph 2.a).

Safety Operations

- The plant was operated safely and generally in accordance with the license. However, a violation was noted for failure to implement, maintain and develop procedures that resulted in two inadvertent halon discharges (Paragraph 2.b).

Fire Protection

- Fire protection and detection equipment were adequately maintained. Fire hazards were appropriately maintained. However the inspectors did note two followup items that will require further review (Paragraph 2.c).

Facility Support

- All of the operations activities observed were performed safely and in accordance with approved procedures (Paragraph 3.a).

Radiation Protection

- External and internal exposure monitoring program was implemented in a manner to maintain doses as low as reasonably achievable (ALARA). Exposures were less than the occupational limits in 10 CFR 20.1201 (Paragraph 4.a).
  - Respiratory protection equipment issuance, maintenance, and training had been adequately implemented (Paragraph 4.b).
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**REPORT DETAILS**

**1. Summary of Plant Status**

Workers returning from the recent strike continued to be assimilated into the workforce. Fuel manufacturing, training activities, and scrap recovery processes were operated throughout the reporting period. Blended low-enriched uranium (BLEU) oxide conversion activities operated normally during the inspection period. BLEU Preparation Facility (BPF) activities were conducted in accordance with approved plant procedures. Decommissioning activities were conducted throughout the inspection period.

**2. Safety Operations**

a. Plant Operations (Inspection Procedure (IP) 88135 and IP 88020)

(1) Inspection Scope and Observations

The inspectors performed numerous walkdowns of the fuel process areas and the BPF. The inspectors verified adequate staffing and evaluated attentiveness of operators in carrying out their assigned duties. Communications were monitored between supervision and line operators. Adequate oversight was provided by supervision. The inspectors verified procedural compliance within the operating areas.

On January 11, 2007, the licensee found the condensate monitor in the BPF was not working properly. The instrument monitors the discard of condensate from the high enriched side of BPF to the low enriched waste side of BPF, ensuring that no significant amounts of material are discarded. The licensee was evaluating the cause and circumstances of this event and identified it in their problem identification, resolution, and correction system (PIRCS) as item #9016. The licensee was investigating the issue and evaluated it as being reportable to the NRC per 10 CFR Part 70 (Event No. 43090, FC NMED No. 070008). In addition, they are reviewing the 10 CFR Part 21 reportability of the event. The resident staff will continue to monitor this issue for further evaluation during the next assessment period.

On January 26, 2007, during one of the resident's tours inside the facility, it was noticed that what appeared to be a used half-face respirator laying in the hallway between the work area and the mens change area. The residents questioned where this respirator had come from since these types of respirators were no longer used within the protected area. Licensee safety personnel collected the item and investigated the issue. They determined that it probably had been used by one of the persons cleaning the change house during the previous strike period. The safety department said they would investigate and determine the steps necessary to prevent further use of these unauthorized masks. The resident staff will continue to monitor this issue.

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