

A Joint Venture of GE, Toshiba, & Hitachi

#### **Global Nuclear Fuel**

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SPM 13-022

April 4, 2013

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D.C. 20555-0001

Subject: 30-day Report of Event – Swarf Press IROFS Failure

References: 1) NRC License SNM-1097, Docket 70-1113 2) GNF-A Event Report 48807, 3/5/2013

Dear Sir or Madam:

In accordance with 10 CFR 70.50(c)(2), Global Nuclear Fuel–Americas, LLC (GNF-A) hereby submits its 30-day report for Event Notification 48807 that was provided on March 5, 2013 (Reference 2). On March 5, 2013, during a post maintenance test of a sole IROFS in the swarf press area, it was discovered that a pressure mat did not function as designed. This IROFS is designed for prevention of a potential fire accident scenario. At no time was an unsafe condition present. Consistent with 10 CFR 70.50(c)(1), a facsimile was submitted on March 5, 2013 providing additional information and is included as an attachment to this letter.

Additional information is provided as follows:

#### **Event Details and Safety Significance**

During a post maintenance test of a sole IROFS in the swarf press area, it was discovered that a pressure mat designed to ensure operator presence did not function as designed. The clutch that should have disengaged when the pressure switch was not active failed to do so. The press was immediately shut down. Criticality controls for the operation were maintained (Moderation and Mass). The sole IROFS is designed to mitigate the consequences of a potential fire accident scenario. At no time was an unsafe condition present. The event was reported pursuant with the reporting requirements of 10CFR70 Appendix A (a)(4) within one hour of discovery.

### Immediate Corrective Actions Taken

On March 5, 2013, the affected swarf press and similar press operations were immediately shut down. A review was initiated to determine additional corrective actions and extent of condition which determined that the actual failure was a degraded clutch assembly controlled by the pressure switch, not the switch itself.

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## **Short Term Corrective Actions**

Temporary operating procedures were issued to communicate operating experience and additional information to operators regarding a potential clutch assembly degradation or similar indication at other press operations identified in the extent of condition review.

Completed March 7, 2013

The issues that caused the clutch assembly at the swarf press to malfunction were identified and resolved.

Completed March 21, 2013

## **Probable Cause of Event**

The clutch assembly failed to remain disengaged from the drive plate while no operator was present on the pressure mat. The failure was a result of a clutch pad bolt backing out and contacting the drive plate, therefore rotating the press even though the clutch pad was not intentionally engaged.

## Longer Term Corrective Action

Enhance or add additional mass controls (in addition to the existing pressure mat) at the swarf press operation. Update the affected Integrated Safety Analysis press operation accident sequence(s).

Scheduled Complete: June 28, 2013

If you have any questions regarding this matter, please contact me at (910) 819-5950.

Sincerely,

Scott Murray, Manager Facility Licensing

Attachment: Event Description

Commitments: As shown above

cc: NRC Region II Administrator, Atlanta, GA
M. Sykes, NRC RII Atlanta. GA
M. L. Thomas, NRC RII Atlanta. GA
M. N. (Nick) Baker, NRC NMSS, Washington, DC
T. D. Naquin, NRC NMSS, Washington, D.C

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## Attachment

# Event Notification Description

During a post maintenance test of a sole IROFS in the scrap press area, it was discovered that a sole IROFS of a pressure mat did not function as designed. The pressure mat is designed to ensure operator presence. The clutch that would be disengaged when the pressure switch is not active failed to do so. The press was immediately shut down. Similar presses have also been shut down. Double contingency was maintained (Moderation and Mass). The sole IROFS is designed for prevention of a fire scenario. At no time was an unsafe condition present.

The event was reported pursuant with the reporting requirements of 10CFR70 Appendix A (a)(4) within one hour of discovery.

Scott Murray Facility Licensing 9:40AM March 5, 2013