



Nuclear Fuel & Components Manufacturing  
General Electric Company  
P.O. Box 780 Wilmington, NC 28402  
919 675-5000

March 2, 1989

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Dear Sir:

Subject: 30 Day Incident Report

Reference: NRC License SNM-1097, Docket #70-1113

In accordance with 10CFR20.405(a)(1)(iv), GE Nuclear Fuel and Components Manufacturing hereby submits the required report for the January 31, 1989 incident involving damage to a completed fuel assembly.

On January 31, 1989 at approximately 10:50 a.m., fuel assembly #LYS100 was being raised in the fuel bundle final inspection stand #1 west. As the fuel assembly reached the top of its travel, the roller chain snapped and the inspection stand lift fixture containing bundle # LYS100 fell unrestrained to the bottom of the 15-foot deep inspection area equipment pit. The inspection pit does not contain water and no personnel were in the pit.

Radiation Protection personnel were immediately contacted to secure the area and survey for possible uncontained radioactive material. All fuel rods were found to have broken loose from the lower tie plate with the end plug broken out of four fuel rods. A few fragments of pellet chips were cleaned from the area with no resulting exposure to personnel.

The fuel assembly was disassembled and removed from the pit to the fuel rod controlled area using the instructions of the Radiation Work Permit (RWP). Radiation Protection personnel monitored the RWP activities, cleanup, and performed the final release surveys on the afternoon of January 31, 1989.

Pending determination of the cause of the inspection stand failure, inspection stand #1 west, as well as five other similar stands, were removed from service.

Based on the damage to the fuel bundle and inspection stand being greater than \$2,000, but less than \$200,000, notification within 24 hours was determined to be required by 10CFR20.403(b)(4). At 3:45 p.m. on 1/31/89 Mr. Jerry Troup, NRC Region II, was notified

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of the incident. Details were provided of the absence of personnel injury and exposure, limited radioactive contamination created by the pellet chips, successful removal of the bundle and estimated damage in excess of \$2,000. Additionally, we indicated a formal report describing the cause and action taken or planned to prevent recurrence would be completed within 30 days as required by 10CFR405(a)(1)(iv).

Under the terms of our license, the incident was identified as a Class II incident and was investigated in accordance with our internal procedures. Based upon this investigation, the cause was found to be a defective limit switch. This limit switch serves to limit the upper travel of the inspection stand lift fixture. Failure of the limit switch allowed the lift fixture to reach its maximum travel position which over-stressed the #60 lift chain beyond it's capacity.

Maintenance personnel performed inspections and checks on all inspection stands including key parts, i.e., limit switches, chains, and sprockets. This was completed prior to return to operation for each inspection stand.

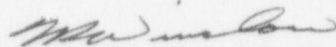
Preventive action planned to reduce the probability of a recurrence includes the installation of redundant limit switches to prevent over-travel in both the up and down directions. Design, procurement, scheduling, and installation will be completed for all inspection stands by the end of 1989.

As an interim measure, a visual indicator has been installed at each inspection stand to alert the operator that the lift fixture is approaching the maximum elevation. The visual indicator will be an interim measure, until the redundant limit switches are installed, to reduce reliance upon the current single limit switch as the primary control mechanism.

We would be pleased to discuss this matter further with you and your staff if deemed necessary.

Sincerely,

GE NUCLEAR ENERGY



T. Preston Winslow, Manager  
Licensing & Nuclear Materials Management

/sbm

cc: Mr. S. D. Ebnetter  
Regional Administrator