GE Nuclear Energy

Nuclear Fuel & Coloponents Manufacturing Deneral Flectic Company PO Buk 780, Winnington, NC 28402 919 878-8000

December 21, 1990

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

Dear Sir:

Subject: 30-Day Incident Report Exhaust Blower Failure

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In accordance with 10 CFR 20.405, GE Nuclear Fuel and Components Manufacturing (NF&CM) hereby submits the required written report for the November 21, 1990, incident involving an exhaust blower failure. This incident was reported by telephone on 11/21/90, at 1615 hrs., by the undersigned to Mr. GL Troup, NRC Region II, and on 11/21/90, at 1630 hrs., to Mr. Steve Bloom at the NRC Operations Center in accordance with 10 CFR 20.403(b)(4) because the damage to property exceeded \$2,000.

On Wednesday, November 21, 1990, an exhaust blower failed when the blower wheel came apart. This exhaust blower, with its associated HEPA filter banks and air washer, is used as an auxiliary room air exhaust for the uranium recovery dissolver room. It's purpose is to remove low concentration nitric acid fumes from this area and to reduce the mixing with other chemical fumes from adjacent areas. The failure of the blower wheel was determined to be a combination of normal wear and deterioration caused by extended exposure to low concentrations of nitric acid fumes. As a result of stack samples and radiation protection surveys, no radioactive contaminants were released to the environment above internal action limits. Airborne uranium concentrations within the uranium recovery area remained below any action levels and no personnel were overexposed. The general area exhaust system and the primary recirculation/ventilation systems were unaffected by the incident and were of sufficient capacity to allow continued operation with proper ventilation and air balance.

Initially, the area was evacuated and work in the uranium recovery area was suspended. As a precaution, full face respiratory protection devices with canisters approved for the potential acid

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fumes and particulates were used by operators necessary to monitor the operation. After determining that airborne concentrations were within normal values and that the area air balance was being maintained, operations were resumed. Replacement parts were received and the unit was repaired and the auxiliary system was returned to normal operation on 11/29/90.

The newly installed blower has been coated with acid resistant material. Maintenance personnel have been instructed to look closely for signs of fan deterioration during their normal preventive maintenance inspections.

The cost of repair was approximately \$4,000 (\$3,000 for replacement parts and \$1,000 for labor).

Please contact me on (919) 675-5461 if you have any questions or would like to discuss this matter further.

Very truly yours, GE NUCLEAR ENERGY

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T. Preston Winslow, Manager Licensing & Nuclear Materials Management

/sbm

cc: SD Ebneter - Region II TPW-90-169