

Frank E. Agosti
Vice President
Nuclear Operations

Detroit
Edison

Fermi 2
6400 North Dixie Highway
Newport, Michigan 48166
(313) 586-4150



Nuclear
Operations

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

- References: 1) Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-342
- 2) NRC Meeting Summary dated
January 14, 1987 for December 11, 1986,
Meeting on Main Steam Turbine Bypass
Flow Line Failure

Subject: Long Term Monitoring Program for the
Main Steam Turbine Bypass Flow Lines

In September 1985, through-wall cracks were discovered in two main steam turbine bypass lines at the Fermi 2 plant. Subsequently, all 30" diameter and all 24" diameter lines, up to the turbine pedestal wall, were replaced with a thicker wall pipe. In addition, piping vibration was analyzed and necessary pipe supports were redesigned as part of the corrective actions taken. The root cause of the problem has been determined to be acoustically induced flutter of the pipe wall. Based upon the test data analyzed by Hopper and Associates and Stone & Webster, it was concluded that the east line could be operated indefinitely and the west line operation is unrestricted so long as the cumulative operating time with bypass valve opened between 30% and 45% does not exceed 100 days.

On December 11, 1986 and January 21, 1987, Detroit Edison met with the NRC to discuss the problem and the corrective actions taken. Based on the discussions held in these meetings, Detroit Edison is implementing a more comprehensive program for the long term monitoring of the main steam turbine bypass flow lines as described below:

1. A record will be maintained for the cumulative operation time of the west bypass line while the bypass valve is opened between 30% and 45%.

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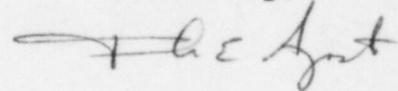
2. The longitudinal pipe seam weld on the west bypass line, between the bypass valve and the first orifice plate, will be ultrasonically inspected. In addition, all girth welds will be visually examined on the same section of the west bypass line for any linear cracking. These inspections will be performed during the first five refueling outages and every other refueling outage there after, as long as the cumulative operation time remains less than 80 days. Any deviations noticed will be examined radiographically.

If the cumulative operating time of the west bypass line with the bypass valve opened between 30% and 45% exceeds 80 days, a reassessment of the line condition will be made and appropriate actions will be taken.

3. All snubbers and hanger locations will be inspected for any weldment distress and loose fasteners such as nuts and bolts, during the first two refueling outages.

If you have any questions, please contact Girija Shukla at (313) 586-4072.

Sincerely,



cc: Mr. E. Greenman
Mr. W. G. Rogers
Mr. J. J. Stefano