

ST. LUCIE NUCLEAR POWER PLANT, UNIT 1

SER Supplement
Docket No. 50-335.

CONTAINMENT OVERPRESSURIZATION POTENTIAL DUE TO AUXILIARY FEEDWATER PUMP RUN-OUT FLOW FOLLOWING A MAIN STEAM LINE BREAK

By letter dated December 21, 1979, the staff requested the Florida Power & Light Company (FP&L), the licensee for the St. Lucie Nuclear Plant, Unit 1 to provide certain additional information. Specifically, the licensee was to assess the potential for containment overpressurization due to the anticipated continuous addition, at pump's run-out flow, of auxiliary feedwater to the affected steam generator following a postulated main steam line break (MSLB) accident.

The staff's interest in this issue resulted from the recommendation of the Three Mile Island, Unit 2 (TMI-2) Lessons Learned Task Force to automate initiation of the auxiliary feedwater systems. Automating the auxiliary feedwater system would cause an increase in energy released to containment after a MSLB; thereby, increasing the containment pressure response to a MSLB.

In a letter dated January 24, 1980, the licensee responded to the staff's letter cited above.

In the original MSLB analysis by FP&L, no consideration was given to auxiliary feedwater pump run-out. The licensee has since performed an analysis that demonstrates that the addition of auxiliary feedwater at the run-out flow condition (2600 gpm) will not cause containment pressure to rise above the initial blowdown peak. The auxiliary feedwater pump run-out flow was based on a backpressure of one atmosphere.

The staff concurs with the licensee's conclusion that the peak containment pressure will remain below the containment design pressure even with the addition of auxiliary feedwater at the run-out flow rate.

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