

**Florida
Power**

CORPORATION
Crystal River Unit 3
Docket No. 50-302

June 5, 1997
3F0697-13

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

Subject: Protection Against Dynamic Effects of LOCA, IFI 95-15-02
(TAC No. M96604)

Reference: A. NRC to FPC letter, 3N0497-12, dated April 10, 1997
B. NRC to FPC letter, 3N0895-07, dated August 11, 1995
C. NRC to FPC letter, 3N0296-07, dated February 26, 1996

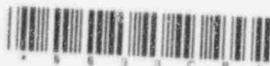
Dear Sir:

Florida Power Corporation (FPC) is submitting this letter in response to Reference A to update the NRC on Inspector Followup Item (IFI) 95-15-02 which was identified in Reference B. References A and C noted that FPC planned to inspect the Reactor Coolant System (RCS) pressurizer surge line for jet impingement and pipe whip effects on the Nuclear Services Closed Cycle Cooling Water (SW) System piping which supply water to the Reactor Coolant Pumps (RCP) inside the Reactor Building D-ring walls. That inspection has been completed.

The results indicate that pipe whip interaction between the surge line and the SW System lines will not occur. Further, these results indicate that additional evaluation is required to determine the jet impingement interaction between the pressurizer surge line and the SW System piping.

The field inspection was performed with the assumption that circumferential or longitudinal breaks could occur at any location on the pipe. A summary of the field inspection results are as follows:

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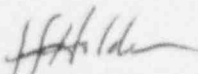
- a. Pipe whip does not have the potential to interact with SW piping associated with RCP-1B. The direction of surge line whip due to a circumferential break at any location on the pipe will be in the opposite direction from the SW System piping.
- b. Pipe whip does not have the potential to interact with SW piping associated with RCP-1A. The cold leg attached to RCP-1A will shield the SW piping from a whip caused by a break at the second elbow from the hot leg nozzle. The whip restraint located 2'-0" below the first elbow from the hot leg nozzle prevents a whip caused by a break at the hot leg nozzle or first elbow.
- c. Circumferential pipe ruptures do not have the potential to result in jet impingement on SW piping associated with RCP-1B. The SW System piping is not located within the free stream expansion jet produced by a circumferential pipe rupture.
- d. Circumferential pipe ruptures do have the potential for jet impingement on SW piping associated with RCP-1A because of the free stream expansion jet produced by a circumferential pipe rupture and there are no jet impingement barriers between the surge line and the SW piping.
- e. Longitudinal pipe ruptures also have the potential to result in jet impingement on SW piping associated with RCP-1A and RCP-1B because of the free stream expansion jet produced by a longitudinal pipe rupture and no jet impingement barriers between the surge line and the SW piping.

In summary, FPC has concluded that based upon the direction of pipe whip, location of the whip restraint, and the presence of physical barriers, pipe whip due to rupture of the surge line will not result in interaction between the surge line and SW piping.

FPC is currently performing an additional evaluation of the jet impingement effects which were identified to have a potential impact on the SW System piping. FPC will provide additional information to the NRC regarding the findings for jet impingement effects between the surge line and the SW piping by September 29, 1997.

The commitments in this letter are contained in the enclosure.

Sincerely,


J. J. Holden
Director, Nuclear Engineering and Projects

JJH/jwt/gmv

xc: Regional Administrator, Region II
Senior Resident Inspector
NRR Project Manager

Enclosure

List of Regulatory Commitments

The following table identifies those actions committed to by Florida Power Corporation in this document. Any other actions discussed in the submittal represents intended or planned actions by Florida Power Corporation. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Manager, Nuclear Licensing of any questions regarding this document or any associated regulatory commitments.

ID NUMBER	COMMITMENT	COMMITMENT DATE OR OUTAGE
3F0697-13-1	FPC will provide additional information to the NRC regarding the findings for jet impingement effects between the surge line and the SW piping.	September 29, 1997