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FLORIDA POWER & LIGHT COMPANY

May 11, 1983
L-83-282

Mr. James P. O'Reilly
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta Street, Suite 2900
Atlanta, GA 30303

Re: St. Lucie Unit No. 2
Docket No. 50-389
10 CFR 50.55(e), 83-003
Westinghouse Gate Valves
Premature Indication of Valve Closure

Dear Mr. O'Reilly:

On February 23, 1983, Florida Power & Light (FPL) notified the NRC of a potential 10 CFR 50.55(e) condition existing at the St. Lucie No. 2 site involving Westinghouse gate valves. FPL has completed its safety evaluation of these valves and has concluded that this item, if left uncorrected, would not adversely effect the health and safety of the public.

Please find enclosed our final report. This report is submitted on the above date per discussions with your Mr. C. A. Julian.

Should you have any questions concerning this report, please do not hesitate to contact us.

Very truly yours,

J. A. De Mastry
for

Robert E. Uhrig
Vice President
Advanced System & Technology

Attachment

REU/PPC/cab

IE 2

1. Summary

Westinghouse Electric Corporation notified Florida Power and Light Company (FPL) of a potential safety concern stemming from the fact that valve position indication will indicate "closed" prior to the valve reaching the fully closed position. We have evaluated this potential safety concern and conclude that it is not reportable under 10 CFR 50.55(e) or 10 CFR 21.

2. Description

A geared limit switch is preset at the factory to provide an electrical bypass of the OPEN torque switch to allow for valve movement at the beginning of the opening stroke. The factory preset could result in actuation of valve closure indication slightly before full valve closure, since position indication and the torque switch bypass are operated from the same geared limit switch rotor. Thus, a potential flow path exists because the small percentage of valve travel from actuation of valve closure indication to completion of the closing stroke (actuation of the torque switch).

To ensure actuation of valve closure indication, the required electrical contacts must be made up prior to opening of the closure circuit by the torque switch; i.e., actuation must occur prior to completion of the closure stroke. Relocation of closure indication to another rotor may allow reduction of the tolerance required from around 5% of stroke to 1 or 2% of stroke. However, the change accomplishes little since both configurations result in the same condition, namely, valve closure indication actuated prior to completion of a small percentage of the closure stroke.

Valve position indication provides intelligence that the valve operator has completed the closure function; periodic testing per the Technical Specifications reaffirms periodically the proper closure of important process flow paths; the valve position indication circuitry does not affect the ability of the valve to close properly; and the factory preset does not introduce an unusually large tolerance (about 5% of stroke) to ensure make-up of valve position indication contacts. Thus, it is concluded that the St. Lucie Unit No. 2 configuration represents a normal design condition.

3. Conclusion

This issue is not reportable with respect to 10 CFR 50.55(e) and this report is final and completes requirements for reporting to the NRC.