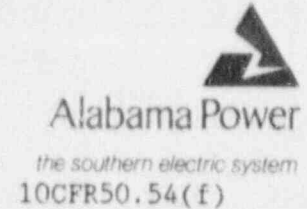


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Senior Vice President
Nuclear Operations

December 14, 1990



Docket Nos. 50-348
50-364

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

Gentlemen:

Joseph M. Farley Nuclear Plant Units 1 and 2
Response to Generic Letter (G.L.) 90-06:
Resolution of Generic Issue 70, "Power-Operated Relief Valve and
Block Valve Reliability," and Generic Issue 94, "Additional
Low-Temperature Overpressure Protection for Light-Water Reactors"

On June 25, 1990 the NRC issued Generic Letter (G.L.) 90-06: Resolution of Generic Issue 70, "Power-Operated Relief Valve and Block Valve Reliability," and Generic Issue 94, "Additional Low-Temperature Overpressure Protection for Light-Water Reactors." In G.L. 90-06 the NRC delineated specific recommendations which address the concerns of Generic Issues 70 and 94. The NRC requested utilities pursuant to 10CFR50.54(f) to commit to: 1) take additional measures to increase the reliability of power-operated relief valves (PORV's) and PORV block valves, 2) modify the technical specification associated with the reactor coolant system (RCS) relief valves to ensure that safety-related functions performed by the PORV's are maintained, and 3) modify the RCS low temperature overpressure protection (LTOP) system technical specification to account for the increased likelihood of an overpressure event during operating Modes 5 and 6 when the RCS is water-solid.

At Farley Nuclear Plant, the PORV's function is to automatically relieve RCS pressure below the pressurizer safety valve setpoint and to reduce RCS pressure upon demand by the operator. Automatic actuation of the PORV's is not assumed to mitigate the consequences of a design basis accident as described in Chapter 15 of the FSAR. The safety functions performed by the PORV's are: 1) inactive valves which form part of the RCS boundary, and 2) manual operation as required by emergency operating procedures. The PORV's are utilized to depressurize the RCS in the event of a steam generator tube rupture and during natural circulation; however, automatic actuation is not relied upon by the emergency operating procedures. The PORV's are not utilized for low temperature overpressure protection; instead, the residual heat removal suction relief valves perform this function.

Section 2 of the Enclosure B to G.L. 90-06 states that additional restrictions regarding the restart of inactive reactor coolant pumps and the operability of high pressure safety injection pumps should be added to the technical specification in order to reduce the risk of a low temperature overpressure event. Farley Nuclear Plant already has such technical specification requirements.

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Alabama Power Company has reviewed the recommendations of G.L. 90-06 and provides as Enclosure 1 a description of the maintenance and procurement practices for PORV's and block valves at Farley Nuclear Plant. The current inservice inspection and testing practices are in agreement with the recommendations for improved reliability as outlined in Section 3 of Enclosure A to G.L. 90-06 with one exception. Alabama Power Company commits to add the valves in the backup nitrogen supply system needed for PORV operation to the Inservice Testing Program.

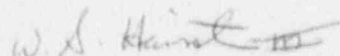
Alabama Power Company is currently evaluating the suggested modified technical specifications. The proposed allowed outage times for an inoperable PORV for reasons other than excessive seat leakage, an inoperable PORV block valve, and an inoperable LTOP channel during Modes 5 and 6 would create a serious restriction on plant operation. Therefore, Alabama Power Company is evaluating means to justify modifying or lengthening the allowed outage times. In addition, Alabama Power Company may wish to clarify PORV operability with a block valve closed for reasons such as periodic testing or excessive packing leakage which would not render the block valve inoperable.

Alabama Power Company will submit a proposed change to the LTOP technical specification or a justification for not changing the current technical specification by the end of the Unit 1 tenth refueling outage which is presently scheduled to begin in March of 1991. A change to the PORV technical specification or a justification for not changing the current technical specification will be submitted by October of 1991. Additional time is needed to develop plant-specific probabilistic risk analysis (PRA) models with one and two PORV's inoperable. The Farley Nuclear Plant PRA model is currently being developed in accordance with the requirements of G.L. 88-20, "Individual Plant Examination (IPE) for Severe Accident Vulnerabilities." Alabama Power Company believes that performing these two similar tasks in concert will best utilize the available resources. Moreover, utilizing a plant-specific PRA model rather than a generic model will add greater validity to the conclusions drawn from them.

If there are any questions, please advise.

Respectfully submitted,

ALABAMA POWER COMPANY



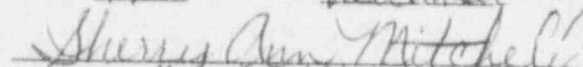
W. G. Hairston, III

WGH,III/BHW:mgd 25.16
Enclosure

cc: Mr. S. D. Ebnetter
Mr. S. T. Hoffman
Mr. G. F. Maxwell

SWORN TO AND SUBSCRIBED BEFORE ME

THIS 14th DAY OF December 1990


Notary Public

my Commission Expires: 12/15/92

ENCLOSURE 1

Response to the Section 3 of Enclosure A to G.L. 90-06

NRC Recommendation

Include PORV's and block valves within the scope of an operational quality assurance program that is in compliance with 10CFR Part 50, Appendix B. This program should include the following elements:

- a. The addition of PORV's and block valves to the plant operational Quality Assurance List.
- b. Implementation of a maintenance/refurbishment program for PORV's and block valves that is based on the manufacturer's recommendations or guidance and is implemented by trained plant maintenance personnel.
- c. When replacement parts and spares, as well as complete components, are required for existing non-safety-grade PORV's and block valves (and associated control systems), it is the intent of this generic letter that these items may be procured in accordance with the original construction codes and standards.

APCo Response

The PORV's and PORV block valves are included within the scope of the Farley Nuclear Plant Quality Assurance (QA) Program (which conforms to the requirements of 10CFR Part 50, Appendix B). The valves are presently incorporated in the FSAR "Q-List". Maintenance on these valves is performed in accordance with the QA Program by trained personnel. Alabama Power Company has developed a preventive maintenance program for the PORV's and the block valves which ensures a continuous high degree of reliability. This program takes into consideration guidance provided by the PORV and PORV block valve manufacturer. All replacement or spare parts for the PORV's and the block valves are procured with the quality assurance requirements of 10CFR Part 50, Appendix B imposed if: 1) the part is required for the PORV or block valve to perform its safety function, or 2) the failure of the part would result in the PORV or block valve not being able to perform its safety function.

NRC Recommendation

Include PORV's, valves in PORV control air systems, and block valves within the scope of a program covered by Subsection IWV, "Inservice Testing of Valves in Nuclear Power Plants," of Section XI of the ASME Boiler and Pressure Vessel Code. Stroke testing of PORV's should only be performed during Mode 3 (Hot Standby) or Mode 4 (Hot Shutdown) and in all cases prior to establishing conditions where the PORV's are used for low-temperature overpressure protection. Stroke testing of the PORV's should not be performed during power operation. Additionally, the PORV block valves should be included in the expanded MOV test program discussed in NRC G.L. 89-10, "Safety-Related Motor Operated Valve Testing and Surveillance," dated June 28, 1989.

APCo Response

Both the pressurizer PORV's and PORV block valves are included in the Farley Nuclear Plant Inservice Testing Program which complies with the requirements of ASME Section XI. The instrument air system is not safety-related and is not assumed to be available to open the PORV's during a design basis accident. Instead, a seismically qualified backup nitrogen supply is installed to perform this function. The valves in the backup nitrogen supply piping that are required for PORV operation will be added to the Inservice Testing Program. The requirement to stroke test the PORV's prior to the time when they provide low-temperature overpressure protection is not applicable to Farley Nuclear Plant since they are not used for this function. In accordance with the Inservice Testing Program the PORV's are stroke tested during Mode 5. The PORV's installed at Farley Nuclear Plant are not air pilot-actuated valves, but instead, are air-operated valves; therefore, RCS pressure does not provide the opening force to manipulate the valve. The air supply to the valve provides the necessary force to open the PORV's during operating conditions. Therefore, performance of stroke testing at actual operating conditions is not required to demonstrate the valve's ability to open. PORV block valves are presently included in the expanded MOV test program as described in our response to NRC G.L. 89-10.