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B.3.2.1
WMY 80-116

July 25, 1980

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Office of Nuclear Reactor Regulation

Reference: (a) License No. DPR-36 (Docket No. 50-309)
(b) USNRC Letter to All Operating Nuclear Power Plants dated October 30, 1979
(c) MYAPC Letter to USNRC dated February 1, 1980 (WMY 80-19)
(d) MYAPC Letter to USNRC dated April 14, 1980 (WMY 80-65)
(e) MYAPC Letter to USNRC dated May 7, 1980 (WMY 80-72)

Subject: Safety Grade Automatic Initiation of the Auxiliary Feedwater System

Dear Sir:

This letter is written to propose a change in schedule for the safety upgrade of the Automatic Initiation circuit of the Auxiliary Feedwater System (AFWS) at Maine Yankee. The requirement per NUREG-0578 is to upgrade the system as currently installed by January 1, 1981.

The present control grade system meets the requirements of General Design Criteria 20 of Appendix A to 10 CFR Part 50 and incorporates each of the seven design criteria delineated by the NRC in Reference (b). The automatic initiation of the AFWS, as installed, consists of a redundant one-out-of-three logic system powered through two separate trains by means of independent vital buses. All equipment is Class 1E or QA related[1], except for the bistable which constitutes the one-out-of-three logic circuits. Although we presently do not have all the necessary documentation for the bistables, we believe this equipment is reliable and will function as designed.

To enhance plant safety beyond that stated in the FSAR, Maine Yankee, upon further evaluation of both the main and auxiliary feedwater systems, has elected to modify said systems to provide isolation redundancy and improve plant safety. These modifications will involve a safety grade trip of

[1] i.e. meets Maine Yankee quality control requirements, but not qualified to current standards.

all pumps in the MFWS on receipt of a coincident SIAS and low steam generator pressure EFCV closure signal. In addition, the capability to automatically isolate auxiliary feedwater to the affected steam generator on a high flow signal will be installed. We are confident that a detailed review of these modifications will enable removal of the presently required five minute delay in the automatic auxiliary feedwater initiation circuitry. Our letter, Reference (e), has committed to install these feedwater modifications by June 1, 1981; however, we propose that the engineering efforts of both your staff and those of Maine Yankee would be more wisely utilized in an expeditious review and installation of the safety grade MFWS pump trip by January 1, 1981; in lieu of upgrading the present, highly qualified, control grade AFWS automatic initiation circuitry presently required by January 1, 1981.

We trust the following information will enlighten your staff to the merits of our proposal for a six month waiver in meeting the requirements to install the safety grade AFWS with automatic initiation:

- We are confident the final feedwater system modification, i.e. pump trip and safety grade closure of the MFWRV and its bypass; and the automatic isolation of auxiliary feedwater, to be completed in June 1981, will remove the current requirement for a five minute delay of the AFWS as detailed in Reference (c).

- Our proposal will only delay the conversion of a highly reliable control grade initiation system by six months, and the possibility of any degredation in this time period is highly remote.

- Our proposal will provide a significant improvement in plant safety by adding a redundant means to secure MFW flow in the event of a SLB accident. To improve the capability of securing MFW flow under certain events, we recently installed a trip of the Main Feedwater Regulation Valve (MFWRV) and its bypass valve on a safety grade excess flow check valve (EFCV) closure signal, as detailed in Reference (e).

- Lastly, the current NUREG-0578 schedule would, at Maine Yankee in particular, prodigalize limited engineering resources by necessitating the alteration of safety grade circuits, installation of additional safety grade equipment and the revision of all the associated prints, etc. Completion of the AFWS isolation modification, dependent upon delivery of safety class valves in June 1981, will, in our judgement, require engineering resources to convert the respective safety grade circuits and related components, installed just six months earlier, to their original configuration.

Numerous demands on engineering resources necessitates that projects be prioritized with consideration of benefits to continued plant safety and reliability. Present manpower and schedule commitments preclude Maine Yankee from completing the main feedwater modifications prior to June 1, 1981 if the AFWS upgrade is required by January 1, 1981. Although the safety grade AFWS would meet the needs of documented equipment qualifications, we nevertheless believe that the health and safety of the public would be better served

through your authorization to install the safety grade MFWS pump trip six months earlier than currently scheduled, in conjunction with a six month waiver on the AFWS automatic initiation system safety grade conversion. The MFW train pump trip will provide the plant with a redundant backup to the control grade MFWRV and its bypass valve trip which was installed in June 1980, and will accommodate a more systematic modification of the auxiliary feedwater isolation system in June, 1981.

We trust the above information will assist in a favorable review of our proposal. Considering the date of this proposal, you can appreciate our need for an expeditious review by your staff if we are to implement this design modification within the proposed time schedule. Should you have any questions or desire further discussion, please feel free to contact us immediately.

Very truly yours,

MAINE YANKEE ATOMIC POWER COMPANY

W. P. Johnson
Vice President

RHG/dln