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On January 9, 1986 with the plant shut down for refueling, a review of Auxiliary Feedwater System flow requirements revealed discrepancy between known flow and flow requirements in the FSAR. A reexamination of the flow requirements resulted. This examination determined that the existing Palisades FSAR, Table 9-14, does not represent the actual design basis flow requirements. Appropriate corrections/revisions will be made to the Palisades FSAR to reflect the actual required flow valves.

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NRC Form 366A

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION APPROVED OMB NO 3150-0104

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NU	PAGE (3)					
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On January 9, 1986, with the plant shut down for refueling, review of Auxiliary Feedwater System flow requirements revealed a discrepancy between the known pumped flow capability of Auxiliary Feedwater Pump, P-8A, and the flow "requirements" stated in Palisades FSAR, Table 9-14, for this particular pump. Available test records indicated that at its rated capacity, the flow rate achievable from P-8A was 400 gpm. Palisades FSAR, Table 9-14, indicated two separate conditions (Steam Line Break, Normal Cooldown) in which a capacity in excess of 400 gpm is listed as the "required capacity." Auxiliary Feedwater Pump, P-8A, was considered inoperable pending resolution of the problem.

Since pump degradation did not appear to be the root of the discrepancy, a reexamination of the actual flow requirements was initiated to determine whether the values listed in FSAR, Table 9-14, were indeed representative of the required flow capacities.

The results of the review indicate that for all of the listed conditions of FSAR, Table 9-14, except for "normal cooldown," Consumers Power Company has previously docketed information stating that the Loss of Main Feedwater condition is the most limiting condition, and that a flow rate of 300 gpm is required if both steam generators are being fed, while 325 gpm is required if only one steam generator is being fed. The "normal cooldown" condition specified by FSAR, Table 9-14, assumes a 75 degrees F per hour cooldown rate. No safety concern is apparent for a normal cooldown at 75 degrees F per hour; however, this cooldown rate was similarly assumed for a cooldown following a steam generator tube rupture event, which is not currently included in FSAR Table 9-14. A conservative calculation was therefore undertaken to establish the minimum required flow to cooldown at 75 degrees F per hour. Utilizing the most limiting scenario and the existing assumptions from Section 14 of the Palisades FSAR, 375 gpm was determined to be the minimum required flow. Therefore, the results of the review confirm that the existing FSAR, Table 9-14, does not represent the actual design basis flow requirements.

Since both previous and subsequent performance testing of Auxiliary Feedwater Pump P-8A verified that the pump was capable of satisfying the actual design basis flow requirements, the plant was not in an unanalyzed condition that significantly compromised plant safety or in a condition which was outside its design basis. Consequently, the reporting requirements of 10CFR50.73 are not considered applicable to this incident, and the information is provided as a voluntary LER.

Appropriate corrections/revisions will be made to the Palisades FSAR to reflect the actual required flow values.



General Offices: 1945 West Parnall Road, Jackson, MI 49201 * (517) 788-0550

February 14, 1986

US Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT - LICENSEE EVENT REPORT 86-005 - REQUIRED AUXILIARY FEEDWATER PUMP FLOW RATES

Licensee Event Report (LER) 86-005, (Required Auxiliary Feedwater Pump Flow Rates) is attached. This event is being made as a voluntary report to the NRC.

Brian D Johnson

Staff Licensing Engineer

CC Administrator, Region III, USNRC NRC Resident Inspector - Palisades

Attachment

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