Regulatory Docket File



General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

July 9, 1975

Mr Robert A. Purple Division of Reactor Licensing US Nuclear Regulatory Commission Washington, DC 20555

DOCKET 50-255, LICENSE DPR-20 PALISADES PLANT, ECCS ANALYSES

On December 27, 1974, the Directorate of Licensing, USAEC, issued an "Order for Modification of License" requiring Consumers Power Company to submit a reevaluation of ECCS cooling performance for the Palisades Plant by July 9, 1975. This "Order" followed a Directorate of Licensing review of evaluations of ECCS cooling performance calculated in accordance with an evaluation model developed by Combustion Engineering, Inc, which was submitted on October 21 and December 16, 1974.

The enclosure entitled "Palisades Core I Reanalysis ECCS Performance Results" has been prepared by our NSSS vendor concerning the Emergency Core Cooling System (ECCS) at the Palisades Plant. As previously discussed in our letter (R. B. Sewell to R. A. Purple dated June 16, 1975), the enclosed analyses used containment data which contains discrepancies. These discrepancies cause the statement in Section II.C of the enclosure, relative to conservation of the containment parameter, to be incorrect. Since observing this discrepancy, we have conducted a containment pressure evaluation based on Branch Technical Position CSB 6-1. This evaluation, using one break, showed that the peak clad temperature remained the same. Based on these results (which are being transmitted by the NSSS vendor under separate cover as Supplement 1 to the "Palisades Core I Reanalysis ECCS Performance Results"), we have concluded that subsequent analysis using revised containment data is not required.

We expect to receive the revised containment data from our Architect-Engineer near the end of July and will forward this data for your review. We will also review this data and provide a revised ECCS analysis if it appears that the conclusion that the present analysis is appropriately conservative is not correct.

Your letter dated June 13, 1975 requested information (some of which had been previously identified) to supplement the ECCS reanalysis. The information requested and our response are listed below.

1. Break Spectrum and Partial Loop Operations

With the possible exception of the discrepancy in the containment data, discussed above, we believe these requirements are met with the enclosed report and conclude that the Palisades Plant conforms to the NRC Final Acceptance Criteria when evaluated using Combustion Engineering approved methods.

2. Potential Boron Precipitation

Our letter (R. B. Sewell to R. A. Purple) dated June 27, 1975 described the current status of this item.

3. Single Failure Analyses

2

A review of Palisades Plant ECCS equipment for vulnerability to single failures as described in the Nuclear Regulatory Commission's Standard Review Plan Branch Technical Position EICSB-18 was conducted. This Technical Position required identification of valves which, if the postulated single system failure caused their maloperation, could cause loss of safety function.

The following five values were identified as having the capability of reducing ECCS performance if any one were to shut from the normally open position because of a single failure or operator error:

> MO-3041, -3045, -3049 and -3052, Safety Injection Tank Isolation Valves

CV-3006, Shutdown Cooling Flow Control Valve

To comply with EICSB-18, the above valves will have their electrical power removed from the operator when in the open position. The remaining valves and components in the system satisfy the single operator error or single failure criteria through redundancy.

4. Submerged Valves

The request for review of specific equipment which may become submerged following a LOCA was received on June 18, 1975. As of this date, we do not have a completion time set for this review. We will inform you as soon as the review is completed.

5. Containment Pressure

A containment pressure evaluation based on Branch Technical Position CSB 6-1 has been conducted and is being transmitted separately by our NSSS vendor as Supplement 1 to the "Palisades Core I Reanalysis ECCS Performance Results."

The December 27, 1974 "Order for Modification of License" also required that a proposed Technical Specifications change accompany the ECCS reevaluation. Accordingly, we have enclosed a proposed Technical Specifications change which both deletes our present Appendix B (interim special Technical Specifications) and incorporates appropriate changes into Appendix A. We will continue to



follow the more restrictive aspects of this proposed Technical Specifications change and the existing Technical Specifications until approval of this change is received.

Neither the PRC or SARB have had an opportunity to review this proposed Technical Specifications change. These reviews are scheduled for completion by mid August 1975. The results of these reviews will be reported at that time.

Ralph B. Sewell / Nuclear Licensing Administrator

CC: JGKeppler, USNRC

3