

CONSUMERS POWER COMPANY  
Docket 50-255  
Request for Change to the Technical Specifications  
License DPR-20

For the reasons hereinafter set forth, it is requested that the Technical Specifications contained in the Provisional Operating License DPR-20, Docket 50-255, issued to Consumers Power Company on October 16, 1972, for the Palisades Plant be changed as described in Section I below:

I. Changes

A. Change Specification 3.3.1.b to read as follows:

"All four Safety Injection Tanks are operable and pressurized to at least 200 psig with a tank liquid level of at least 174 inches (52%) and maximum level of 198 inches (59%) with a boron concentration of at least 1720 ppm but not more than 2000 ppm."

B. Change the fourth paragraph of Section 3.3 Basis as follows:

"The limits for the Safety Injection Tank pressure and volume assure the required amount of water injection during an accident and are based on values used for the accident analyses (3,4). the minimum 174-inch level corresponds to a volume of 1040 ft<sup>3</sup> and the maximum 198-inch level corresponds to a volume of 1166 ft<sup>3</sup>."

C. Add the following to References:

"(3) FSAR, Section 14.17

(4) Letter, H. G. Shaw (ANF) to R. J. Gerling (CPCo), "Standard Review Plan Chapter 15 Disposition of Events Review for Changes to Technical Specification Limits on Palisades Safety Injection Tank Liquid Levels", April 11, 1990"

II. Discussion

Current Palisades Plant surveillance procedures require that the boron concentration of the Safety Injection Tanks (SIT) be checked periodically and corrected if necessary. In order to obtain a representative sample of the boron solution in the SIT, it is sometimes necessary to drain the Safety Injection Tank to a level below the currently identified Technical Specification minimum level (186 inches). Plant Technical specification 3.3.2.a requires that during power operation; "One safety injection tank may be inoperable for a period of no more than one hour." Because the SIT level may fall below the minimum level allowed by the Plant Technical Specifications during the surveillance procedure, the possibility also exists that the minimum level may not be restored within the one hour as required by Specification 3.3.2.a. Decreasing the minimum level of the SIT from 186 inches to 174 inches decreases the likelihood that the

surveillance procedure itself will result in the tank being declared inoperable and will decrease the burden placed on the operations staff performing the surveillance.

### III. Analysis of No Significant Hazards Considerations

Consumers Power Company finds that activities associated with this proposed technical specification change involve no significant hazards. The following evaluation supports that finding.

1. Will the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated.

The probability of a LOCA, the accident of concern, is independent of the liquid level in the SIT. The effect of a slightly reduced total liquid volume in the SIT's was evaluated by Advanced Nuclear Fuels (ANF), the fuel vendor for the Palisades Plant. The ANF analysis indicated that the reduction in SIT inventory did not significantly affect the results of the current licensing basis LOCA analysis and that the current analysis remains bounding. Neither the probability of a LOCA nor the consequences of a LOCA will be increased.

2. Will the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated.

The SIT system is a passive system with the entire volume being released in a single actuation. Therefore, the proposed reduction in the minimum liquid level required by the technical specifications does not change the function of the SIT nor does it affect the interface between the SIT and other Plant systems. The analysis by ANF concluded that for a large break LOCA, reduction of minimum SIT level does not change the course of the event. Because the change involves a reduction in the minimum amount of water stored in the SIT's the probability of overflowing and malfunctions due to seismic events are not increased. Thus, this change does not create the possibility of a new or different kind of accident.

3. Will the proposed change involve a significant reduction in the margin of safety.

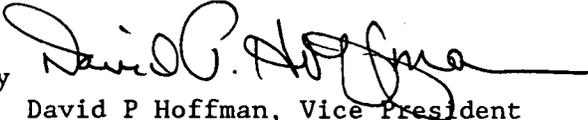
The SIT's are a passive system whose normal function is to discharge their entire contents into the primary coolant system (PCS) on low PCS pressure. This function is independent of the initial level of the SIT's. If a LOCA should occur with all SIT's at the minimum level proposed by this change the total volume of coolant added to the PCS would be slightly less than is available under the current specification. However, analysis by ANF indicates that the peak cladding temperature of 2114°F currently postulated for a LOCA is not affected by the proposed change in the minimum SIT level. Therefore, the margin of safety will not be reduced.

IV. Conclusion

The Palisades Plant Review Committee has reviewed this Technical Specification Change Request and has determined that this change does not involve an unreviewed safety question and, therefore, involves no significant hazards consideration. This change has been reviewed by the Nuclear Safety Services Department. A copy of this Technical Specification Change Request has been sent to the State of Michigan official designated to receive such Amendments to the Operating License.

CONSUMERS POWER COMPANY

To the best of my knowledge, information and belief, the contents of this Technical Specification Change Request are truthful and complete.

By   
David P Hoffman, Vice President  
Nuclear Operations

Sworn and subscribed to before me this 13th day of JUNE 1990.

Elaine E Buehrer, Notary Public  
Jackson County, Michigan  
My commission expires October 11, 1993

