



**Consumers
Power**

POWERING

MICHIGAN'S PROGRESS

Palisades Nuclear Plant: 27780 Blue Star Memorial Highway, Covert, MI 49043

G B Slade
General Manager

December 7, 1990

Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
TECHNICAL SPECIFICATIONS CHANGE REQUEST - MAIN FEEDWATER ISOLATION

Enclosed is a request for change to the Palisades Technical Specifications to incorporate the automatic closure of the Main Feedwater Isolation valves on containment high pressure or steam generator low pressure.

Enclosure 1 to this submittal contains proposed changed Technical Specification pages, Enclosure 2 has existing Technical Specification pages marked-up to show the proposed changes, and Enclosure 3 contains the results of analysis which shows that main feedwater isolation on a containment high pressure signal is necessary to prevent the containment design pressure limit from being exceeded over the entire size range of steam line break events. The proposed requirements of this Technical Specifications change request are more restrictive than existing Technical Specifications requirements. This change request should be made effective 30 days after approval.

Gerald B Slade
General Manager

CC: Administrator, Region III, USNRC
NRC Resident Inspector

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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. Add "e" to Item 1 of Table 3.16.1 to read as follows:

<u>Functional Unit</u>	<u>Channel</u>	<u>Setting Limit</u>
1. High Containment Pressure	e. Main Feedwater Isolation (4)	3.70-4.40 psig

and, add footnote (4) to read:

"(4) by closing both the main feedwater regulating valve and bypass valve."

B. Add "b" to Item 4 of Table 3.16.1 to read as follows:

<u>Functional Unit</u>	<u>Channel</u>	<u>Setting Limit</u>
4. Low Steam Generator Pressure	b. Main Feedwater Isolation (4)	>500 psia

C. Add "c" to Item 2 of Table 3.17.3 to read as follows:

<u>Functional Unit</u>	<u>Minimum Operable Channels</u>	<u>Minimum Degree of Redundancy</u>	<u>Permissible Bypass Conditions</u>
c. Containment High Pressure	2 ^(a,c)	1	During Leak Test

D. Add Item 3 to Table 3.17.3 to read as follows:

<u>Functional Unit</u>	<u>Minimum Operable Channels</u>	<u>Minimum Degree of Redundancy</u>	<u>Permissible Bypass Conditions</u>
3. <u>Main Feedwater Isolation(d)</u>			
a. Low Steam Gen. Pressure	2/Steam Gen ^(c)	1	Below 550 psia(b)
b. Manual	1/Steam Gen	None	None
c. Containment High Pressure	2 ^(a,c)	1	During Leak Test

and, add footnote (d) to read: "by closing both the main feedwater regulating valve and bypass valves."

E. Add Item 21 to Table 4.1.2 to check, every 18 months, that main feedwater isolates on either a containment high pressure or a stem generator low pressure signal.

II. Discussion

Change A adds main feedwater isolation, by closing the feedwater regulating and bypass valves, as a channel which will be initiated when containment high pressure rises to 3.70-4.40 psig.

Change B adds main feedwater isolation by closing the feedwater regulating and bypass valves, as a channel which will be initiated by a low steam generator pressure signal which is greater than or equal to 500 psia, except this isolation signal may be bypassed when the steam generator pressure is less than 550 psia.

Change C adds containment high pressure as a condition which will cause main steam line isolation and lists the instrument operating conditions for the containment high pressure channels. This requirement is already addressed in Item 1.a of this same table and is being added here for clarity.

Change D adds main feedwater isolation as a functional unit activated by low steam generator pressure, manually or by containment high pressure and lists the instrument operating conditions for the low steam generator pressure, manual and high containment pressure channels.

Change E adds surveillance requirements to assure that the conditions and limits required by changes A, B, C, and D are operable.

The modifications to the plant systems to reflect the requirements of this proposed Technical Specifications change have been installed. Although, main feedwater isolation on low steam generator pressure was installed in 1981 and has been an engineered safety feature initiating condition since that time, the requirement for it has not been part of the Technical Specifications. Main feedwater isolation on Containment High Pressure (CHP) was installed during the Spring 1990 Maintenance Outage. At the present time and as required by this proposed change, both the MFW regulating valves (CV-0701, CV-0703) and by-pass valves (CV-0734, CV-0735) close on either CHP or low steam generator pressure.

The results of the main steam line break analysis (Attachment 3) completed for the new Palisades Steam Generator Project shows that containment design pressure will not be exceeded during a steamline break if feedwater is isolated on both Containment High Pressure (CHP) and low Steam Generator pressure. Additionally, the analysis of standard review plan Chapter 15 events for Cycle 9 fuel, (ANF 90-78, submitted to the NRC on October 3, 1990) shows that the effect of isolating main feedwater on both CHP and low Steam Generator pressure is conservative.

III. Analysis of No Significant Hazards Consideration

Consumers Power Company finds that activities associated with this change request include no significant hazards; and, accordingly, a no significant hazards determination per 10CFR50.92(c) is justified. The following evaluation supports the conclusion that the proposed change would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

This change does not significantly increase the probability of an accident previously evaluated because it only effects operation after an accident has occurred. Testing and operation of the new functions are in accordance with approved plant procedures; therefore, there will not significantly increase the probability of the loss of feedwater accident which has been previously addressed. This change does not increase the consequences of an accident previously evaluated because it adds containment high pressure and low steam generator pressure as conditions which will cause isolation of main feedwater to assure main feedwater will be rapidly isolated and thus result in containment pressure remaining below design pressure limits after a main steam line break. This change reduces the consequences of an accident (MSLB) previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

This change does not create the possibility of a new or different kind of accident previously evaluated since it favorably effects the ability to safely shutdown after an accident has occurred and uses previously evaluated existing equipment to perform the valve closure isolation function. This change does not effect operation before an accident.

3. Involve a significant reduction in the margin of safety.

This change does not involve a significant reduction in the margin of safety because the margin of safety which this change involves is the pressure difference between the containment design pressure limit of 55 psig and the pressure at which the containment pressure boundary would fail. This change assures that containment pressure will stay below the containment design pressure limit of 55 psig after a worst-case main steam line break.

III. 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. Further, the change 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
David P Hoffman, Vice President
Nuclear Operations

Sworn and subscribed to before me this 7th day of December 1990.

Beverly J. Levitski
, Notary Public
County, Michigan
My commission expires

BEVERLY J. LEVITSKI
Notary Public, Charlevoix County, MI
My Commission Expires May 11, 1993