



**Consumers
Power
Company**

Kenneth W Berry
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March 17, 1986

Director,
Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
TECHNICAL SPECIFICATION CHANGE REQUEST - REACTOR
VESSEL PRESSURE/TEMPERATURE LIMITS

Attached are three (3) originals and thirty-seven (37) conformed copies of a request for change to the Palisades Technical Specifications. The attached changes provide new reactor vessel pressure-temperature limits for heat-up and cooldown and hydrostatic test to account for the effects of irradiation on the vessel materials.

This change request will provide new, more restrictive pressure-temperature limits that extend the present limits from 6.6 effective full power years (EFPY) to approximately 9.0 EFPY. The current limits are projected to expire (based on 100% power operation from the end of the refueling outage) approximately mid August 1986.

A check in the amount of \$150.00 is enclosed as required by 10CFR170.21.

Kenneth W Berry

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Director, Nuclear Licensing

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

Attachment

OC0386-0043-NL04

8603200199 860317
PDR ADOCK 05000255
P PDR

*Acc'd
3/37
Rec'd w/ check \$150.00
457021*

III. Conclusion

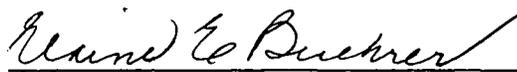
The Palisades Plant Review Committee has reviewed this Technical Specification Change Request and has determined that this change does not involve an unreviewed safety question and therefore involves no significant hazards consideration. This change has also been reviewed under the cognizance of the Nuclear Safety Board. 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

By


J W Reynolds, Vice President
Energy Supply

Sworn and subscribed to before me this 17th day of March 1986.


Elaine E Buehrer, Notary Public
Jackson County, Michigan

My commission expires October 31, 1989

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. Specification 3.1.2.e(2), delete the last 3 sentences and replace with the following:

"Such a conversion shall be made consistent with the dosimetry evaluation of Capsule W-290⁽¹²⁾."

- B. Specification 3.1.2.e(3), add reference footnote 8 after 60°F, to read, "60°F⁽⁸⁾."

- C. Specification 3.1.2 Basis, fourth paragraph, delete the following sentence. "The maximum integrated ... 80% load factor." and change footnote reference "(6)" to "(10)" in following sentence.

- D. Specification 3.1.2 Basis, ninth paragraph, change the following numbers:

<u>From</u>	<u>To</u>
1.3 x 10 ¹⁹ nvt	1.8 x 10 ¹⁹ nvt
223°F	241°F
170°F	183°F
352°F	371°F
352°F	371°F

- E. Specification 3.1.2 Basis, last paragraph, delete the fourth and fifth sentences that begin and end as; "For heatup rates less than ... thus a composite curve is drawn."
- F. Specification 3.1.2, Figure 3-1 is completely revised to reflect new heatup limits.
- G. Specification 3.1.2, Figure 3-2 is completely revised to reflect new cooldown limits.

- H. Specification 3.1.2, Figure 3-3 is completely revised to reflect new inservice hydrostatic test limits.
- I. Specification 3.1.2 References, Reference 12 added,
"Analysis of Capsules T-330 and W-290 from the Consumers Power Company Palisades Reactor Vessel Radiation Surveillance Program," WCAP-10637, September, 1984.
- J. Specification 3.1.3(b), change 352°F to 371°F.
- K. Specification 3.1.3 Basis, in the third paragraph change 286°F to 371°F.

II. Discussion

Changes A and C more clearly identify the data origin, and deletes information contained in reference and evaluation documents.

Change B provides a reference for the 60°F value.

Changes D, F, G, H, I and J reflect new values or figures due to data derived in Attachment I, Engineering Analysis, EA-WJA-85-38, Palisades Reactor Pressure Vessel Temperature Limits Determination.

Change E deletes information no longer consistent with Figures 3-1 and 3-2.

Change K provides the reference to the Capsule W-290 analysis.

Refer to Attachment I, Engineering Analysis, EA-WJA-85-38, for determination of the pressure-temperature limits.

Analysis of No Significant Hazards Consideration

The revised pressure-temperature limits are required to meet the reactor vessel fracture toughness requirements in 10CFR50 Appendix G. In order to operate safely, the reactor pressure vessel (RPV) must be kept in the ductile region. Therefore, pressure-temperature limits are defined to ensure the RPV will not be stressed under conditions which promote brittle failure. Higher temperature and corresponding higher pressure limits are required to compensate for the effects of neutron exposure on the RPV material. The higher operating limits account for the irradiation effects and maintain the RPV within its nil-ductility transition temperature. Therefore, the proposed change does not involve an increase in the probability or consequences of a previously evaluated accident and a new or different kind of accident is not created.

Operation of the RPV within the nil-ductility temperature, as determined by the methodology in Regulatory Guide 1.99, revision 2, will ensure the margin of safety is maintained.