Docket No. 50-255 LS05-85-09-009

Mr. David J. VandeWalle Director, Nuclear Licensing **Consumers** Power Company 1945 W. Parnall Road Jackson, Michigan 48071

Dear Mr. VandeWalle:

SUBJECT: AMENDMENT NO. 89 TO PROVISIONAL OPERATING LICENSE NO. DPR-20 Palisades Plant Re:

On August 21, 1985, the subject Amendment was issued regarding revised pressure/temperature limits for heatup, cooldown and hydrostatic test of the reactor vessel. Your staff notified us of a typographical error on page 3-6 of the Technical Specifications issued with that amendment. This is in the "Basis" section for the Specification 3.1.2 and involved the inadvertent dropping of seven words from the text. We are enclosing a corrected page 3-6 and ask that you replace page 3-6 in all controlled copies of the Technical Specifications with the corrected page. We are sorry for any inconvenience this causes.

Sincerely,

Original signed by:

John A. Zwolinski, Chief Operating Reactors Branch #5 Division of Licensing

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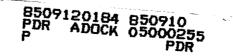
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Mr. David J. VandeWalle Consumers Power Company

cc:

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Palisades Plant ATTN: Mr. Joseph F. Firlit General Manager 27780 Blue Star Memorial Hwy. Covert, Michigan 49043

Resident Inspector c/o U.S. NRC Palisades Plant 27782 Blue Star Memorial Hwy. Covert, Michigan 49043 Palisades Plant

Nuclear Facilities and Environmental Monitoring Section Office Division of Radiological Health P.O. Box 30035 Lansing, Michigan 48909

3.1.2 Heatup and Cooldown Rates (Contd)

Basis (Contd)

both longitudinal and shear wave methods. The remaining material in the reactor vessel, and other primary coolant system components, meets the appropriate design code requirements and specific component function and has a maximum NDTT of $+40^{\circ}F$. (5)

As a result of fast neutron irradiation in this region of the core, there will be an increase in the RT with operation. The techniques used to predict the integrated fast neutron (E > 1 MeV) fluxes of the reactor vessel are described in Section 3.3.2.6 of the FSAR and also in Amendment 13, Section II, to the FSAR.

Since the neutron spectra and the flux measured at the samples and reactor vessel inside radius should be nearly identical, the measured transition shift from a sample can be applied to the adjacent section of the reactor vessel for later stages in plant life equivalent to the difference in calculated flux magnitude. The maximum exposure of the reactor vessel will be obtained from the measured sample exposure by application of the calculated azimuthal neutron flux variation. The maximum integrated fast neutron (E > 1 MeV)exposure of the reactor vessel is computed to be 5.9 x 10^{19} nvt for 40 years' operation at 2540 MWt and 80% load factor. The predicted RT_{NDT} shift for the base metal has been predicted based upon surveillance data and the appropriate US NRC Regulatory Guide. (6) To compensate for any increase in th RT caused by irradiaiton, limits on the pressure-temperature relationship are periodically changed to stay within the stress limits during heatup and cooldown.

Reference 7 provides a procedure for obtaining the allowable loadings for ferritic pressure-retaining materials in Class 1 components. This procedure is based on the principles of linear elastic fracture mechanics and involves a stress intensity factor prediction which is a lower bound of static, dynamic and crack arrest critical values. The stress

3-6

Amendment No. 21, 41, 55, 89