September 10, 1985

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

Re: Palisades Plant

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

DISTRIBUTION

Docket File	CJamerson	EJordan	MVirgilio
NRC PDR	TWambach	BGrimes	ACRS (10)
Local PDR	JZwolinski	JPartlow	CMiles, OPA
ORB #5 Rdg	OELD	TBarnhart (4)	RDiggs
HThompson	LHarmon	WJones	

SE01
DSU USE 04

JVW
DL:ORB#5
TWambach:jg
9/11/85

DL:ORB#5
JZwolinski
9/10/85

Mr. David J. VandeWalle
Consumers Power Company

Palisades Plant

cc:
M. I. Miller, Esquire
Isham, Lincoln & Beale
51st Floor
Three First National Plaza
Chicago, Illinois 60602

Mr. Thomas A. McNish, Secretary
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Judd L. Bacon, Esquire
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Jerry Sarno
Township Supervisor
Covert Township
36197 M-140 Highway
Covert, Michigan 49043

Office of the Governor
Room 1 - Capitol Building
Lansing, Michigan 48913

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

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°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 5.9×10^{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