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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • Richland, Washington 99352-0968

July 14, 1998
GO2-98-121

Docket No. 50-397

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Gentlemen:

Subject: **WNP-2, OPERATING LICENSE NPF-21
ADDITIONAL INFORMATION ON RPV PRESSURE TEMPERATURE
LIMIT CURVES**

- References:
- 1) Letter GO2-97-077, dated April 24, 1997, JV Parrish (SS) to NRC, "WNP-2, Operating License NPF-21, Submittal of WNP-2 RPV Surveillance Materials Testing and Analysis Report"
 - 2) Letter GO2-97-144, dated July 16, 1997, PR Bemis (SS) to NRC, "WNP-2, Operating License NPF-21, Request for Amendment to Technical Specifications to Support Vessel Leak Testing"
 - 3) Letter GO2-98-092, dated June 2, 1998, D.W. Coleman (SS) to NRC, "WNP-2, Operating License NPF-21, Withdrawal of Request for Amendment to Technical Specifications to Support Vessel Leak Testing"

Reference 2 submitted, for review and approval, new minimum reactor pressure versus reactor metal temperature (P/T) curves applicable for up to 12 Effective Full Power Years (EFPY). While assessing the data contained in Reference 2, the NRC reviewer questioned how consideration of a 9.5" thick plate section in the lower core region would influence the submittal results. The NRC reviewer further questioned whether the current 32 EFPY P/T curves in the WNP-2 Technical Specifications bounded the reference nil-ductility temperature (RT_{NDT}) associated with the 9.5" thick section in view of the fact that the current P/T curves were developed using a thickness of 7.5". This letter provides additional information concerning the 9.5" plate section with regards to the current WNP-2 P/T limit curves.

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**REQUEST FOR ADDITIONAL INFORMATION
PRESSURE TEMPERATURE LIMIT CURVES**

Page 2

To answer the NRC reviewer's question, new reference temperatures were calculated for the 9.5" plate section using the existing computer code which was updated to include the 1989 version of ASME Code Section XI Appendix G. An estimate of 80% peak fluence at the 9.5" plate section was used in calculating the new reference temperatures. The 80% value is conservative because peak fluence occurs at approximately 100" above the bottom of active fuel (BAF) whereas the 9.5" plate section extends approximately 14" above BAF and fast neutron flux levels drop off significantly near both ends of the active fuel.

After reviewing the computer generated results obtained using the above described input, the Supply System has determined that the current 32 EFPY P/T curves bound the RT_{NDT} for the 9.5" section.

The Technical Specification amendment requested by Reference 2 has been withdrawn by Reference 3. However, based upon a commitment contained in Reference 1, the Supply System will submit new P/T limit curves by April 24, 1999.

Should you have any questions or desire additional information regarding this matter, please contact me or P. J. Inserra at (509) 377-4147.

Respectfully,

 for

D.W. Coleman (Mail Drop PE20)
Manager, Regulatory Affairs

cc: EW Merschoff - NRC RIV
KE Perkins, Jr. - NRC RIV, WCFO
C Poslusny, Jr. - NRR

DL Williams - BPA/399
PD Robinson - Winston & Strawn
NRC Sr. Resident Inspector - 927N