

**ENERGY
NORTHWEST**

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

December 14, 2000
GO2-00-206

Docket No. 50-397

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

Gentlemen:

Subject: **WNP-2, OPERATING LICENSE NPF-21
REQUEST FOR AMENDMENT
TECHNICAL SPECIFICATIONS 3.3.5.1, 3.3.6.1 and 3.3.6.2
(ADDITIONAL INFORMATION)**

Reference: Letter, dated October 31, 2000, Jack Cushing (NRC) to JV Parrish (Energy Northwest), "Request for Additional Information (RAI) for WNP-2, (TAC NO. MA9889)"

In the reference, the staff requested additional information to support review of our September 5, 2000 amendment request to add notes to Technical Specifications 3.3.5.1, 3.3.6.1, and 3.3.6.2 for WNP-2.

The requested information is included as an attachment. Should you have any questions or desire additional information regarding the matter, please call me or PJ Inserra at (509) 377-4147.

Respectfully,



DW Coleman
Manager, Regulatory Affairs
Mail Drop PE20

Attachment

cc: EW Merschoff - NRC RIV
JS Cushing - NRC NRR
DJ Ross - EFSEC

NRC Resident Inspector - 988C
TC Poindexter - Winston & Strawn
DL Williams - BPA/1399

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STATE OF WASHINGTON)
)
)
COUNTY OF BENTON)

Subject: WNP-2 Operating License NPF-21
Request for Amendment
Technical Specifications 3.3.5.1, 3.3.6.1
and 3.3.6.2 (Additional Information)

I, DW Coleman, being duly sworn, subscribe to and say that I am the Manager, Regulatory Affairs for ENERGY NORTHWEST, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief that the statements made in it are true.

DATE Dec. 14, 2000

D. W. Coleman

DW Coleman
Manager, Regulatory Affairs

On this date personally appeared before me DW Coleman, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this 14 day of December 2000

Lois A. May

Notary Public in and for the
STATE OF WASHINGTON

Residing at Richland, WA

My Commission expires 3-29-01

REQUEST FOR ADDITIONAL INFORMATION

WNP-2, OPERATING LICENSE NPF-21

NRC Question 1

Please identify the safety-related pumps, other than the low pressure coolant injection pumps, that are prevented from starting simultaneously by time delay relays in their start circuitry, and which provide a closing signal to pump breakers in a set sequence to prevent undesirable voltage transient on the 230 kV power source. Justify why the 230 kV power source is not declared inoperable should these timers become inoperable and why these timers are not included in the plant technical specifications.

Energy Northwest Response to Question 1

There are no other safety related pumps that are prevented from starting by time delay relays (TDR) whose failure would result in overloading of the 230 kV offsite power source. However, there are two other pumps that are provided with time delay relays (TDR) in their start circuitry which provide a closing signal to the pump breakers in a set sequence to prevent undesirable voltage transients on the 230 kV power source. These pumps are the Standby Service Water (SW) pumps for electrical divisions 1 and 2, SW-P-1A and SW-P-1B. The time delay setting associated with each of these pump relays is approximately 20 seconds.

Final Safety Analysis Report Figure 8.3-3 Note 3 identifies a condition where three pumps may simultaneously start due to a small break LOCA event scenario. If the TDR for SW-P-1A was to become inoperable and tripped (i.e., the TDR fails in the initiate breaker close permissive position) in conjunction with the event scenario described, the result could be as many as four pumps starting simultaneously on the 230 kV power source. The four pumps are Low Pressure Core Spray (LPCS-P-1), Low Pressure Coolant Injection (RHR P-2C), SW P-1A, and SW P-1B. However, analysis indicates that with these four pumps starting simultaneously on the 230 kV power source, the resulting voltages at each pump motor's terminal connection would be greater than the specified minimum 80% of motor rated voltage. The 4.16 kV buses supplying these pumps would be approximately 81% of bus nominal voltage. Hence, even with four pumps starting simultaneously due to an inoperable TDR, the 230 kV power source will remain available to supply the emergency core cooling system (ECCS) and SW pumps during all design basis events. Therefore, it is not necessary to declare the 230 kV power source inoperable if the SW-P-1A TDR was inoperable. Furthermore, it is not necessary to specify the SW time delay relays as a specific instrument function within the Technical Specification. If a SW time delay relay was found to be inoperable, the definition of Operability ("...all necessary attendant instrumentation, controls,...") would be the controlling criteria for system Operability and the SW System LCO 3.7.1.B would be the appropriate Condition and Required Action. The SW time delay relays are calibrated on a biennial interval and any abnormal operation would be detected during the ECCS subsystem quarterly operability testing or biennial integrated loss of power and ECCS initiation testing.

REQUEST FOR AMENDMENT TECHNICAL SPECIFICATIONS
3.3.5.1, 3.3.6.1 and 3.3.6.2 (ADDITIONAL INFORMATION)
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NRC Question 2

It is stated in the first paragraph on page 2 of 5 of your submittal that if a loss-of-coolant accident (LOCA) drywell pressure-high signal was received after the time delay relays had timed-out [due to an instrument failure] both low pressure emergency core cooling system pumps in that electrical division would start at approximately the same time as the high pressure core spray pump. Likewise, if a LOCA caused a rapid decrease in reactor vessel water level, the level-1 LOCA signal could be initiated closely following the level-2 LOCA signal causing a similar multiple pump start condition. This could result in significant voltage transient on the 230 kV offsite power transformer. Please clarify if this scenario did take place, would a qualified offsite power source be available after the transfer takes place from the startup transformer to the backup transformer.

Energy Northwest Response to Question 2

Yes, the qualified 115 kV offsite power source (backup transformer) would be available. If a LOCA signal (high drywell pressure or low reactor vessel water level) was received after the pump start time delay relays had timed-out (due to instrument failure), both low pressure system pumps along with the HPCS pump would start simultaneously. If this scenario were to occur, the 230 kV startup transformer would become overloaded, undervoltage would be sensed at the bus, and a transfer to the 115 kV offsite power source would occur. However, no overload of the 115 kV power source would occur since the HPCS pump power sources are the 230 kV power source and its dedicated emergency diesel generator (EDG). Therefore, for this scenario, the 115 kV offsite power source would remain available to power all ECCS low pressure system pumps, as well as, the supporting service water pumps, while the HPCS system would be powered by its dedicated divisional EDG.