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SUBJECT: Provides updated info re resolution of SBO for WNP-2.

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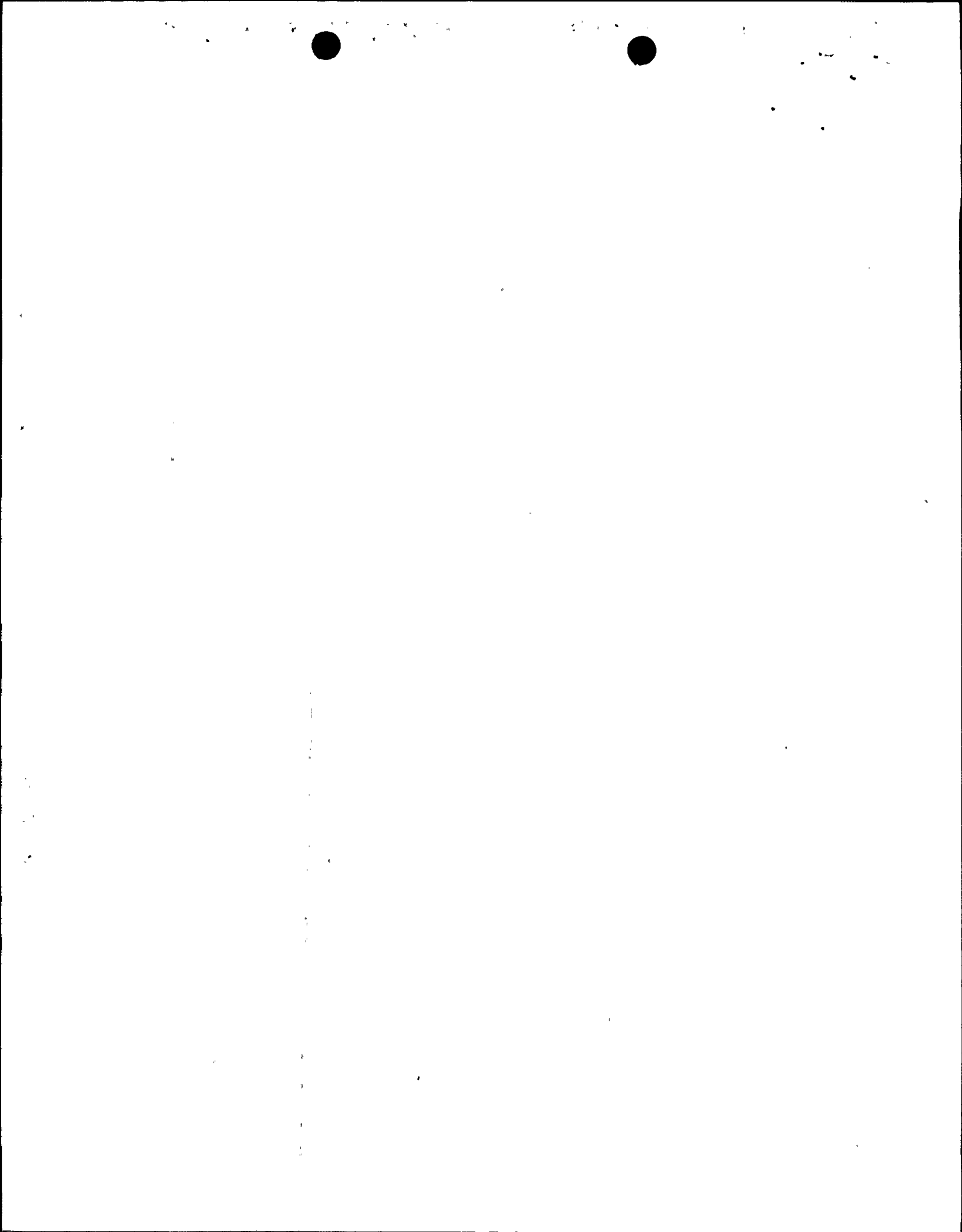
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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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January 6, 1994
G02-94-002

Docket No. 50-397

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

Gentlemen:

Subject: **NUCLEAR PLANT NO. 2, OPERATING LICENSE NPF-21
UPDATED INFORMATION REGARDING STATION BLACKOUT
RESOLUTION (TAC No. M68626)**

- References:
1. Letter GO2-92-057, dated March 6, 1992, GC Sorensen (SS) to NRC, "Safety Evaluation of the Washington Public Power Supply System Nuclear Project Number 2 Station Blackout Analysis"
 2. NUMARC 87-00, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors," revised August 1991
 3. Letter, dated December 30, 1991, PL Eng (NRC) to GC Sorensen (SS), "Safety Evaluation of the Washington Public Power Supply System (WPPSS) Nuclear Project Number 2 Station Blackout Analysis (TAC No. M68626)"
 4. Letter GO2-91-091, dated May 7, 1991, GC Sorensen (SS) to NRC, "Additional Information Regarding SBO (TAC No. 68626)" and Letter GO2-91-091, dated May 7, 1991, GC Sorensen (SS) to NRC, "Additional Information Regarding SBO (TAC No. 68626)"
 5. Letter GO2-92-099, dated April 15, 1992, GC Sorensen (SS) to NRC, "Safety Evaluation of the Washington Public Power Supply System Nuclear Project Number 2 Station Blackout Analysis (TAC No. M68626)"
 6. Letter GO2-92-183, dated July 31, 1992, GC Sorensen (SS) to NRC, "Station Blackout Supplemental SER and Implementation Schedule, 10CFR50.63(c)(4), TAC No. M68626"
 7. Letter, dated June 26, 1992, RR Assa (NRC) to GC Sorensen (SS), "Supplemental Safety Evaluation (SSE) of the Washington Public Power Supply System Nuclear Project No. 2 (WNP-2) Station Blackout Analysis (TAC M68626)"

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**UPDATED INFORMATION REGARDING
STATION BLACKOUT (TAC No. M68626)**

The purpose of this letter is to provide updated information regarding resolution of Station Blackout (SBO) for WNP-2.

Primary Containment Temperatures and Pressures

In Reference 1 the Supply System provided the initial temperature assumptions and the final temperatures and pressures calculated for a four hour Station Blackout at WNP-2 as:

<u>Space</u>	<u>Initial Temp °F</u>	<u>Final Temp °F</u>	<u>Pressure psig</u>
Drywell	135	280	40
Wetwell air	135	240	42
Wetwell water	90	240	

These temperatures and pressures were calculated based upon an assumed primary system leakage rate of 200 gpm. This leakage value was chosen as the resolution of Generic Issue 23 (Reactor Coolant Pump Seal Integrity) was uncertain at the time the original analysis was performed. The Supply System recognized that a leakage value greater than the 18 gpm/pump value for BWR SBO resolution might be required upon resolution of Generic Issue 23. It now appears that such a value will not be required of BWRs and the rulemaking to achieve resolution of Generic Issue 23 will only apply to PWRs. Consequently, we have completed the primary containment heatup analysis for WNP-2 for an assumed primary system leakage rate of 61 gpm which includes the 18 gpm/pump required by Appendix J of Reference 2 for BWRs plus the maximum Technical Specification value of 25 gpm.

With a leakage rate of 61 gpm, the four hour primary containment temperatures and pressures are:

	<u>Initial Temp °F</u>	<u>Final Temp °F</u>	<u>Pressure psia/psig</u>
Drywell	135	229	35.3/20.6
Wetwell air	150	179	29.7/15.0
Wetwell water	90	209	

The initial temperature assumption for the wetwell airspace was changed from 135 to 150°F to reflect the fact that there is no Technical Specification limit on this parameter but that an annunciator response procedure does require action at 147°F.

The above temperatures and pressures were determined for an initial power of 3629 MWt which is greater than the currently planned power uprate level of 3486 MWt.



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**UPDATED INFORMATION REGARDING
STATION BLACKOUT (TAC No. M68626)**

Condensate Inventory

The Reference 3 SBO Safety Evaluation for WNP-2 states in Section 2.3.1 that "The licensee indicated that the Technical Specifications (TS) require a minimum condensate storage tank reserve of 135,000 gallons of water".

In Reference 4 the Supply System corrected a previous statement in this regard and informed the NRC that the Technical Specification value of 135,000 gallons only applies in Modes 4 and 5. In Reference 4 other means of ensuring the inventory of water during Mode 1 were discussed. These other means of ensuring the inventory are acknowledged in Section 2.3.2 of the Safety Evaluation.

Battery Room Heating

In Reference 5 it was stated that the battery room temperatures would be maintained to $74 \pm 1^{\circ}\text{F}$ in the heating and cooling modes.

As part of the implementation of improved setpoint methodology for WNP-2, the setpoints for the battery room heaters have been recalculated. The Lower Analytical Limit used in these calculations is the Technical Specification value of 60°F . This limit was not established at 74°F as the consideration for the 6°F deadband and environmental, accident and other effects would have resulted in excessively high battery room temperatures. To ensure that the rooms containing batteries B1-1 and B1-2 are maintained at or above 74°F during normal operation, administrative controls are in place to require corrective action should the temperature be less than 74°F .

Sincerely,



J. V. Parrish (Mail Drop 1023)
Assistant Managing Director, Operations

AGH/bk

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NS Reynolds - Winston & Strawn
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