

CATEGORY 1

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SUBJECT: Forwards formal calculation to analyze RSB 5-1 natural circulation CD as part of work needed to support LAR to raise rated thermal power from 3800 to 3876 Mwt.

See Rpt.

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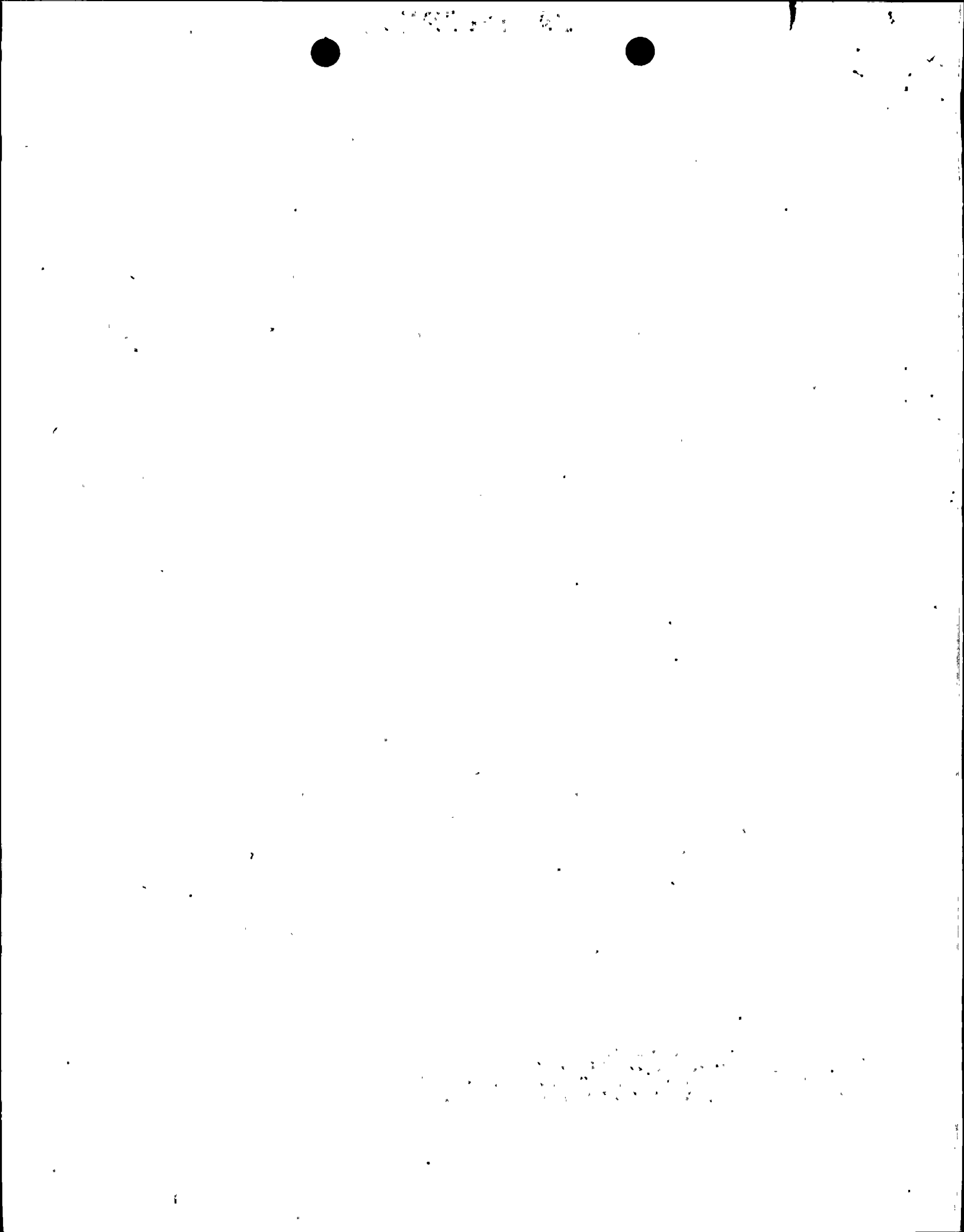
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Arizona Public Service Company

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P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

102-03703-WLS/SAB/GAM

May 21, 1996

JACK A. BAILEY
VICE PRESIDENT
ENGINEERING

U. S. Nuclear Regulatory Commission
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Reference: Letter No. 102-03278, dated March 9, 1995, from W. L. Stewart, APS, to USNRC, "Charging System/Auxiliary Pressurizer Spray System Commitments."

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2, and 3
Supplement to Submittal Related to Charging System/Auxiliary
Pressurizer Spray System Commitments**

In the referenced letter, Arizona Public Service Company (APS) provided justification to cancel commitments to modify the charging systems in PVNGS Units 1, 2, and 3. The commitments were made in response to a PVNGS Unit 2 license condition that required APS to submit an evaluation and implementation schedule regarding a long-term solution to eliminate the need for venting hydrogen from the suction of the charging pumps.

One element of the justification to cancel the charging system commitments, provided in Section C (page 8) of the enclosure to the referenced letter, was that in the unlikely event that the charging pumps become gas bound and auxiliary pressurizer spray could not be used, an alternative means of achieving cold shutdown could be used that would meet the guidance of Branch Technical Position (BTP) RSB 5-1. The alternative means would use the high pressure safety injection system in conjunction with the reactor coolant gas vent system to accomplish makeup and depressurization functions. Appendix B of the enclosure to the referenced letter contained the results of a study by ABB-Combustion Engineering (ABB-CE) that provided reasonable technical assurance of the feasibility of the alternative cooldown/depressurization method.

Since the referenced letter was submitted, a formal calculation has been performed to analyze RSB 5-1 natural circulation cooldown as part of the work needed to support the PVNGS operating license amendment request to raise rated thermal power from 3800 Mwt to 3876 Mwt. The completed natural circulation cooldown analysis confirms that

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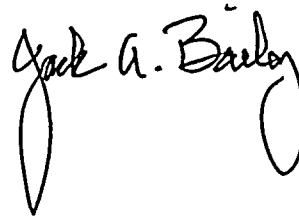
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Supplement to Submittal Related to Charging System
Page 2

the PVNGS units can be cooled to shutdown cooling entry conditions following a loss of offsite power in accordance with BTP RSB 5-1 using either a charging pump with auxiliary spray or a high pressure safety injection pump with the reactor coolant gas vent system.

Enclosure 1 is a non-proprietary summary engineering report of the RSB 5-1 natural circulation cooldown analysis for PVNGS. Enclosure 2 is the proprietary RSB 5-1 natural circulation cooldown analysis for PVNGS. Enclosure 2 contains information which is proprietary to ABB-CE, for which an affidavit is provided. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the NRC and specifically addresses the considerations listed in 10 CFR 2.790(b)(1). Accordingly, it is requested that Enclosure 2 be withheld from public disclosure in accordance with 10 CFR 2.790(b)(1).

Should you have any questions, please contact Scott A. Bauer at (602) 393-5978.

Sincerely,

A handwritten signature in black ink that reads "Jack A. Bailey". The signature is written in a cursive style with a large, looped "B" at the end.

WLS/SAB/GAM/rv

Enclosures

cc: L. J. Callan
K. E. Perkins
C. R. Thomas
K. E. Johnston
A. V. Godwin (ARRA)

ENCLOSURE 1

