

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

April 27, 1982 2 49:03

BLRD-50-438/82-09  
BLRD-50-439/82-09

U.S. Nuclear Regulatory Commission  
Region II  
Attn: Mr. James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

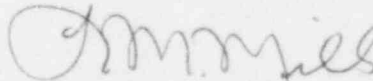
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - TEMPERATURE OF NITROGEN SUPPLY -  
BLRD-50-438/82-09, BLRD-50-439/82-09 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector D. Johnson on January 14, 1982 in accordance with 10 CFR 50.55(e) as NCR BLN BLP 8201. This was followed by our first interim report dated February 17, 1982. Enclosed is our second interim report. We expect to submit our next report by August 13, 1982.

If you have any questions concerning this matter, please get in touch with R. H. Shell at FTS 858-2688.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager  
Nuclear Licensing

Enclosure

cc: Mr. Richard C. DeYoung, Director (Enclosure)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Mr. James McFarland (Enclosure)  
Senior Project Manager  
Babcock & Wilcox Company  
P.O. Box 1260  
Lynchburg, Virginia 24505

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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2  
TEMPERATURE OF NITROGEN SUPPLY  
NCR BLN BLP 8201  
BLRD-50-438/82-09, BLRD-50-439/82-09  
10 CFR 50.55(e)  
SECOND INTERIM REPORT

Description of Deficiency

Nitrogen is used as a cover gas for various safety-related pieces of equipment such as the Reactor Coolant System pressurizer, steam generators, and core flood tanks. B&W document No. 67-1003781-00, "Plant Limits and Precautions," lists the minimum temperature requirements for nitrogen to be supplied to this equipment. Contrary to the above requirements, the present nitrogen system design supplies nitrogen below the required temperature.

B&W document No. 67-1003781-00 was issued in 1978 well after development of the design of the nitrogen system. Since the document did not directly relate to the nitrogen system design, it was not routed to the nitrogen system designers for their review. This condition went unnoticed until the problem was discovered during a design review of one of the systems that interface with the nitrogen system.

Interim Progress

A review of the temperature requirements for the nitrogen at the interface points with other systems has been completed and calculations have been made to size the necessary heaters to heat the nitrogen to levels to meet equipment requirements. TVA is now investigating means to be taken to prevent a recurrence and applicability to other TVA nuclear plants.