TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

14 P1:52

May 10, 1984

U.S. Nuclear Regulatory Commission Region II Attn: Mr. James P. O'Reilly, Regional Administrator 101 Marietta Street, NW, Suite 2900 Atlanta, Georgia 30303

Dear Mr. O'Reilly:

BELLEFONTE NUCLEAR PLANT UNIT 1 - RESPONSE TO VIOLATION 50-438/84-04-02 - FAILURE TO DOCUMENT A CONDITION WHICH IS ADVERSE TO QUALITY

This is in response to D. M. Verrelli's letter dated March 22, 1984, report numbers 50-438/84-04, 50-439/84-04 concerning activities at the Bellefonte Nuclear Plant which appeared to have been in violation of NRC regulations. Enclosed is our response to the citations.

Delays of this submittal were negotiated with NRC-OIE Inspector P. E. Fredrickson on April 20, 1984 and again on May 7, 1984.

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

To the best of my knowledge, I declare the statements contained herein are complete and true.

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, D.C. 20555

Records Center (Enclosure)
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

8411080340 841031 PDR ADOCK 05000438 Q PDR BELLEFONTE NUCLEAR PLANT UNIT 1
RESPONSE TO SEVERITY LEVEL V VIOLATION
50-438/84-04-02
FAILURE TO DOCUMENT A CONDITION WHICH IS ADVERSE TO QUALITY

Description of Deficiency

10 CFR 50.54(a)(1) requires the licensee to implement the quality assurance program described in TVA Topical Report TVA-TR-75-1A. Section 17.2.5 of the report requires that activities affecting safety-related functions be conducted in compliance with the Office of Power procedures. Procedure BLA 16.1, Identification of Conditions Adverse to Quality and Corrective Action, requires documentation of conditions adverse to quality within three working days of identification of the condition and specifies the manner of documentation.

Contrary to the above, by March 2, 1984, a condition adverse to quality, froth on the station batteries, had not been documented in accordance with BLA16.1 although it had been identified in September 1981.

1. Admission of Denial of the Alleged Violation

TVA denies the violation of procedure BLA16.1 occurred as stated. However, TVA does admit that the condition could have been entered into a formal tracking program at the time of discovery.

2. Reason for Denial

In September 1981, nine months before acceptance of the unit 1 station batteries by the Division of Nuclear Power (NUC PR) from the Division of Construction (CONST), NUC PR personnel identified froth as a concern associated with the unit 1 batteries. At this time, the condition was not documented in accordance with procedure BLA16.1 since BLA16.1 clearly states that "requirements apply to safety-related equipment that has been transferred to the Division of Nuclear Power." The unit 1 station batteries had not been transferred. TVA personnel from NUC PR, CONST, and the Division of Engineering Design (EN DES) reviewed the station battery frothing and requested vendor evaluation of the frothing concern by phone on February 9, 1982. By letter dated February 10, 1982, C&D Batteries Division provided the results of their evaluation to TVA by stating the following:

Typically, in such cases where this material is found to be on the surface of the electrolyte, it has been identified as minute fragments of glass fiber which have come loose during the handling of the mat and separator assembly during the maintenance of the cell as well as an excess amount of the binder used to adhere the glass mat assembly to the separator.

Consequently, since all materials used in the manufacture of the cells are compatible with other components within the cell itself, there are no adverse conditions which may develop apart from a cosmetic appearance. Thus, no deleterious effects regarding cell life or performance will be anticipated concerning this matter.

On June 24, 1982, NUC PR accepted transfer of station batteries 1EU-01 and the previous results of the evaluation concerning frothing from CONST. Since the condition adverse to quality had been identified and was considered resolved before transfer, the condition was not documented in accordance with BLA16.1.

However, as a result of NUC PR's continuing concern over the cosmetic appearance of the froth formation on unit 1 station batteries, the vendor performed the froth removal procedure in December 1982. By letter dated January 16, 1984, C&D Batteries Division provided TVA the results of their further evaluation as follows:

Typically, the material found floating on the electrolyte surface is fragments/filaments of the cells' retainer mat material. The mat is located within the cell element between the positive plate and the separators. The mat is intended to reduce the shedding of active material normally experienced from the positive plate during the cells anticipated service life.

Although we have received reports that conditions may develop wherein the mat material may fragment and float on, or become suspended within, the cell electrolyte, typically it does not affect or interfere with the cells performance or life expectancy apart from the cell having a poor cosmetic appearance.

C&D Batteries has conducted tests on cells similar to those at Bellefonte which were manufactured with and without a retainer mat assembly. The net result of all tests was that full life expectancy could be realized without the retainer mat along with equal or improved cell performance capabilities.

In summary, at the time of discovery, TVA did not believe that the item was a condition adverse to quality and consequently, did not believe that it should have been documented as such. TVA does not believe it is appropriate to initiate a review of items in accordance with BLA16.1 at the time of transfer which have been previously resolved by technical review by CONST and EN DES.