

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

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April 20, 1984

BLRD-50-438/84-02

BLRD-50-439/84-02

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:

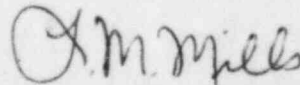
BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2 - FAILURE TO INCORPORATE INCREASED
SUPPORT - BLRD-50-438/84-02, BLRD-50-439/84-02 - SECOND INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector P. E. Fredrickson on December 22, 1983 in accordance with 10 CFR 50.55(e) as NCR 2661. This was followed by our interim report dated January 18, 1984. Enclosed is our second interim report. We expect to submit our next report by August 30, 1985.

If you have any questions, 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, D.C. 20555

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

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ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2
FAILURE TO INCORPORATE INCREASED SUPPORT LOADS INTO DESIGN
BLRD-50-438/84-02, BLRD-50-439/84-02
NCR 2661
10 CFR 50.55(e)
SECOND INTERIM REPORT

Description of Deficiency

During the course of scheduled NRC-OIE Bulletin 79-14 walkdown exercise, a number of supports on rigorous analysis problem N4-1KE-4, for the Emergency Raw Cooling Water (ERCW) system, were discovered not to be in agreement with analysis data in regard to loads and movements. Some supports were designed by ITT Grinnell while the remainder of these supports were designed per the TVA load-rated typical program. Specific support designs found to be disagreeing with ERCW analysis drawings 1KB0506-KE-41 R1 and 1KB0506-KE-42 R2 were:

1KE-MPHG-0046 R3	1KE-MPHG-0054 R1	1KE-MPHG-0097 R2
1KE-MPHG-0049 R0	1KE-MPHG-0057 R0	1KE-MPHG-0101 R0
1KE-MPHG-0051 R0	1KE-MPHG-0059 R0	1KE-MPHG-0114 R0
1KE-MPHG-0053 R0	1KE-MPHG-0061 R0	1KE-MPHG-0127 R0
		1KE-MPHG-0140 R0

There are two separate parts to this deficiency. The first part consists of a failure to review the revised analysis drawing 1KB0506-KE-41 R1. This drawing is a support load table for supports which were designed by ITT Grinnell. TVA support review personnel reviewing the revised drawing learned that other changes to analysis problem N4-1KE-4 were scheduled as a result of engineering change notice (ECN) 1626. Therefore, the support review personnel decided to defer the review until ECN 1626 was incorporated. When the new analysis drawings were issued the revised analysis review was completed, identifying all needed changes for the subject analysis and for ECN 1626. All supports found to be inadequate were identified to be redesigned. No Division of Engineering Design (EN DES) procedures were violated in failing to review the above drawing revision. The time lag between the second analysis issue and support review caused the analysis and the supports to temporarily disagree.

The second part consists of a failure to revise the support detail sheets for TVA-designed load-rated typical supports for changes made on support load table drawing 1KB0506-KE-42 R1. These supports were placed on construction hold and identified to the Division of Construction (CONST) by memorandum dated November 17, 1982 as requiring revision. The personnel reviewing the support at the site released the listed support with no revision required. This resulted from an error by the site personnel in determining when a support required revision for an analysis change. EN DES had determined that the incorrect release of rigorously analyzed typical supports which required revision for analysis changes was a generic error at Bellefonte (BLN).

Interim Progress

The following supports were placed on construction hold to be redesigned per normal EN DES procedures:

1KE-MPHG-0046 R3	1KE-MPHG-0054 R1
1KE-MPHG-0049 R0	1KE-MPHG-0057 R0
1KE-MPHG-0051 R0	1KE-MPHG-0059 R1
1KE-MPHG-0053 R0	1KE-MPHG-0061 R0

The above supports were ITT Grinnell supports on 1KB0506-KE-41 R1. The following typical supports have been placed on hold per ECN 1626 for changes due to that ECN:

1KE-MPHG-0097 R2
1KE-MPHG-0101 R0
1KE-MPHG-0114 R0
1KE-MPHG-0127 R0
1KE-MPHG-0140 R0

The corrective action for the generic error will be that EN DES will review all load-rated typical supports on revised rigorous analysis to resolve the deficiency. Those supports found in error will be revised to reflect the correct analysis information. EN DES personnel (who now review typicals instead of CONST) will be instructed in the proper methods of revising typical supports. Also, Bellefonte Design Project Engineering Procedure 44.77 will be revised to prevent recurrence of these deficiencies.