

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

February 16, 1983

BLRD-50-438/83-13

BLRD-50-439/83-09

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 - IMPROPERLY QUALIFIED NOZZLE LOADS  
- BLRD-50-438/83-13, BLRD-50-439/83-09 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector D. Verrelli on January 24, 1983 in accordance with 10 CFR 50.55(e) as NCR BLN CEB 8220. Enclosed is our first interim report. We expect to submit our next report by April 27, 1983.

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*

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

8302230645 830216  
PDR ADDCK 05000438  
S PDR

ORIGINAL COPY

IE 27

## ENCLOSURE

BELLEFONTE NUCLEAR PLANT UNITS 1 AND 2  
IMPROPERLY QUALIFIED NOZZLE LOADS  
BLRD-50-438/83-13, BLRD-50-439/83-09  
NCR BLN CEE 8220  
10 CFR 50.55(e)  
FIRST INTERIM REPORT

### Description of Deficiency

Piping analysis problems N4-1ND-A, N4-2ND-A, N4-1ND-B, N4-2ND-B, N4-1(2)NV-A, and N4-1(2)NV-M were issued using improperly qualified nozzle loads. The manufacturer's equipment specifications for nozzle qualification was not followed. Typically, evaluations are made for normal, upset, and faulted conditions. However, in the subject piping analysis problems, only a faulted evaluation using incorrect allowables was performed. This improper evaluation could result in unqualified nozzles in the normal or upset condition. The decay heat removal (DHR) and the makeup and purification (MU/P) pump nozzles are the ones affected. Additionally, further evaluation to qualify the flange bolts required by the manufacturer's equipment specifications was not performed.

### Interim Progress

TVA is currently reviewing Bellefonte piping analysis packages to ensure that all nozzle qualifications are being performed in accordance with the manufacturer's equipment specifications. Any improperly qualified nozzle loads found during the review will be analyzed and recalculated to meet manufacturer's specifications. Any other problems will be documented and reported accordingly.

Teledyne Engineering Services of Walpham, Massachusetts, who performed the piping analysis evaluations, has been advised of this deficiency and will be requested to provide a root cause and action required to prevent recurrence.