## THE CINCINNATI GAS & ELECTRIC COMPANY



CINCINNATI OHIO 45201 June 25, 1982 QA-1835

E. A. BORGMANN

U. S. Nuclear Regulatory Commission Region III 799 Roosevelt Road Glen Ellyn, Illinois 60137

Attention: Mr. J. G. Keppler Regional Administrator

> RE: WM. H. ZIMMER NUCLEAR POWER STATION UNIT 1 10CFR50.55(e)-ITEM M-14-DEFECTS IN HVAC DAMPER ACTUATORS-DOCKET NO. 50-358, CONSTRUCTION PERMIT NO. CPPR-88 W.O. #57300 JOB E-5590 FILE NO. NRC-8,M-14

## Gentlemen:

This letter constitutes an interim report concerning the subject deficiency, initially reported to the Commission under 10CFR50.55(e).

MCC Powers (MCC) and American Warming & Ventilating (AWV) were notified by ITT General Controls (ITT) of two deficiencies involving springs used in AH90 and NH90 series Hydromotor Electrohydraulic Actuators which were utilized in safety related applications. Incorrect selection nomographs were used which provided spring force data which did not include the effects of friction or hydraulic residual forces. This means that with additional forces of approximately 100 lbs. of friction and 40 lbs. of residual hydraulic pressure, these actuators may not meet the specified safety factor with respect to the thrust delivered to the damper assembly. In addition, the actuator spring used in some Hydromotor Actuators may have been manufactured from an incorrect material which could result in the spring taking a permanent set if the actuator stroke is greater than three inches.

The required corrective action for this item involves

- 1) Spring adjustment to overcome the additional forces.
- Spring replacement for those springs fabricated of the incorrect material and a stroke greater than three inches.

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- Spring replacement for those which cannot be adjusted within allowable load limits.
- Replacement of the actuator if the minimum required torque cannot be attained through spring adjustment or replacement.

The action necessary to resolve this deficiency is being independently addressed by each vendor. AWV replaced a defective spring on one (1) actuator and readjusted twelve (12) others to meet the required safety factor. For control damper actuators supplied by MCC, three (3) will require spring adjustments, seventeen (17) will require spring replacement, and eight (8) will be completely replaced. Actions necessary to complete this rework are expected to be completed by December 31, 1982, at which time a final report will be submitted.

We trust the above will be found acceptable as an interim report under 10CFR50.55(e).

Bv

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

6.4. Borgman

E. A. BORGMANN SENIOR VICE PRESIDENT

FKP:plc

cc: NRC Office of Inspection & Enforcement
Washington, D.C. 20555
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