THE CINCINNATI GAS & ELECTRIC COMPANY

CINCINNATI, OHIO 45201

June 13, 1983
LOZ-83-0038

J. WILLIAMS, JR
SENIOR VICE PRESIDENT
NUCLEAR OPERATIONS

Docket No. 50-358

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

Attention: Mr. J.G. Keppler
Regional Administrator

Gentlemen:

RE: WM. H. ZIMMER NUCLEAR POWER STATION - UNIT 1
EXPANSION OF THE QUALITY CONFIRMATION PROGRAM
W.O. 57300, JOB E-5590, FILE NO. 956C,

The attached Quality Confirmation Program Task descriptions address three of the four items identified in my letter of May 13, 1983 (LOZ-83-0030), wherein we indicated that masonry wall construction, seismic columns, bolting, and coatings would be included in the Quality Confirmation Program. The fourth issue concerning Service Level 1 Coatings in containment has been identified pursuant to 10CFR50.55(e) as Item S-5 on September 14, 1982. Future activities related to coatings will be addressed by separate correspondence requesting authorization to proceed with work in this area prior to release of the NRC November 12, 1982 "Order Show Cause and Order Immediately Suspending Construction" (CLI-82-33).

The QCP is also being expanded to include seismic clearance walkdowns. The details of this additional QCP expansion are under study and we will advise you of our approach to this activity in the near future.

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We will keep you informed as to our progress in developing procedures to implement appropriate activities to resolve these concerns.

Very truly yours,

THE CINCINNATI GAS & ELECTRIC COMPANY

By J. Williams, Jr.
J. WILLIAMS, JR.
SENIOR VICE PRESIDENT

GCF/JFS/sfr

cc: NRC Office of Inspection & Enforcement
Washington, D.C. 20555
NRC Senior Resident Inspector
ATTN: W.F. Christianson
NRC Zimmer Project Inspector
Region III

9752 6/3/87

QCP TASK XII

BOLTING

I. PROBLEM

A. Inadequate installation of high strength bolting has been identified, (i.e., insufficient torquing, improper material, improper orientation, enlarged bolt holes and missing bolts).

B. Inadequate "equipment mounting" bolting has been identified (i.e., improperly installed concrete expansion anchors, loose bolts, insufficient torquing, cut off anchor bolts and missing bolts.)

C. Initial review of "bolting inspection documentation" indicates insufficient inspection criteria and documented inspection information.

II. ACTION

1.) Review FSAR and Specifications for Program requirements.

2.) Review Contractors Installation/Inspection Procedures to verify that all requirements of "Action 1 "above have been addressed.

3.) Review Contractor Installation and Inspection Records to verify program requirements have been satisfied.

4.) Where Record Review identifies deficiencies, in non-compliance with 1 & 2 above perform a field verification based on a minimum of 2 bolts per connection.

5.) If field verification establishes installed deficiencies, correct the deficiencies as follows:

A.) When engineering evaluation is not required document the deficiency and correct in-process.

B.) When engineering evaluation is required process a nonconformance report.

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QCP TASK XIII

MASONRY WALLS

I. PROBLEM

A. Unfilled collar joints.

B. Discontinuous or missing joint reinforcement.

C. Inappropriate ventilation fire seal details.

II. ACTION

1.A) For safety-related double wythe walls, demonstrate that all postulated wall loadings can be resisted assuming two independent walls rather than one monolithic wall.

B. Identify any other safety-related masonry walls where collar joints were relied on for load resistance and demonstrate their adequacy by either verification of collar joint fill or by engineering analysis described in (A).

C. Appropriate modifications will be implemented for those walls found to be inadequate with respect to the engineering calculations in (A) and (B).

D. Walls which have running bond through their thickness need not be considered in the above evaluations.

2.A.) Identify by Engineering Analysis the masonry walls for which 80% or more of the joint reinforcement was relied on to resist load. For these walls in situ testing will be performed to establish that the required reinforcement exists.

B.) Should additional inspections prove that the 80% minimum in place joint reinforcement assumption was inappropriate, justify revised criteria.

C.) Confirm that the discontinuity of joint reinforcement across columns does not adversely affect current or previous wall evaluations.

3.A.) For all walls in which fire and/or ventilation seal are required, the type of in situ seal will be established and its adequacy to perform its intended function verified.

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QCP TASK XIV

SEISMIC COLUMNS

I.) PROBLEM

A. Inadequate embedded seismic column connections.

II.) ACTION

1.) For the embedded seismic columns in all safety-related masonry walls, structural evaluations of the column end connections will be made for all postulated load combinations assuming the following conditions are concurrent, or in the most adverse combination, at both end connections:
   A. Bolts located in their slots at their most adverse positions.
   B. Up to 200 ft.-lb. of torque in each bolt, considering an appropriate apparent coefficient of friction (above that normally considered for steel/steel contact) for connection slip to account for missing washers, oversize slots, and flame cut slots and holes.
   C. A 25% reduction in weld size.

2.) For these connection evaluations, it will be demonstrated under all postulated loading conditions that:
   A. Allowable stresses were not exceeded in all connection items.
   B. A factor of safety of 2 exists on weld stresses compared with the governing code-allowable limits, considering the minor deficiencies noted in the exposed welds, in addition to the undersize.

3.) In addition, adequacy of the slots will be demonstrated assuming they are rectangular.

4.) In those instances where the above criteria are not satisfied, additional evaluations, inspections, and/or modifications will be required to demonstrate column connection adequacy.

5.) If additional inspections yield information that would affect the criteria given in (1) and (3) above, appropriate revisions to the criteria will be incorporated, as justified.