

UNITED STATES NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Construction Inspection

IE Inspection Report No. 050-358/75-04

Licensee: Cincinnati Gas and Electric Company  
139 East 4th Street  
Cincinnati, Ohio 45201

W. H. Zimmer Nuclear Power Station  
Moscow, Ohio

License No. CPPR-88  
Category: A

Type of Licensee: BWR (GE) - 807 MWe

Type of Inspection: Routine, Unannounced

Dates of Inspection: July 21 - 23, 1975

Principal Inspector:

*T. E. Vandell*  
T. E. Vandell

8-14-75  
(Date)

Accompanying Inspectors: D. M. Hunnicutt

*D. M. Hunnicutt*  
D. M. Hunnicutt

8/14/75  
(Date)

*S. W. Sutton*  
S. W. Sutton

8-14-75  
(Date)

Other Accompanying Personnel: None.

Reviewed By:

*D. W. Hayes*  
D. W. Hayes  
Senior Reactor Inspector  
Construction and Engineering  
Support Branch

8/14/75  
(Date)

## SUMMARY OF FINDINGS

### Inspection Summary

Inspection on July 21 - 23, (75-04): Reviewed corrective actions established in response letter to enforcement items identified in previous report and status of previously identified unresolved matters. Inspected protection and handling of stored equipment, results of audits, and QA/QC program provisions for safety related painting work.

### Enforcement Items

None.

### Licensee Action on Previously Identified Enforcement Items

The infractions identified in IE Inspection Report No. 050-358/75-02 and the corrective action outlined in the Cincinnati Gas and Electric Company (CG&E) letter of response dated June 19, 1975, were reviewed during the inspection with the following information received.

#### A. Quality Assurance Manual - Inland-Rverson, Incorporated (I-R)

The I-R QA manual and field inspection manual are presently under review by the licensee following their requested revision. The licensee indicated that they are not in a position at the present time to indicate the acceptability of the revised manual. Follow-up is planned during the next routine inspection.

#### B. I-R Management QA Audits

As was identified in the previous paragraph, the revised quality assurance manual and field inspection manual are presently under review by the licensee. Therefore, further review relative to management audits will be conducted during the next routine inspection.

### Other Significant Items

#### A. Systems and Components

The licensee indicated that they plan to install the Reactor Pressure Vessel (RPV) by December 1, 1975. The Aycock Company has been contracted to provide the installation procedures and plans and to perform the work.

B. Facility Items (Plan and Procedures)

None.

C. Managerial Items

The inspector was informed by the licensee that Mr. W. H. Dickhoner, formerly Executive Vice President of CG&E, has been appointed President of the company. In addition, Mr. E. A. Borgmann was appointed Vice President, Engineering, as of July 1, 1975.

D. Noncompliance Identified and Corrected by the Licensee

None.

E. Deviations

None.

F. Status of Previously Reported Unresolved Items

1. Diesel Oil Storage Tanks (IE Inspection Report No. 050-358/75-03)

Sargent and Lundy Engineers (S&L) issued a memo on May 8, 1975, which summarized the results of their study regarding the diesel oil storage tanks affected by the high water level. The S&L conclusion was that there is no measureable evidence that the two undisturbed tanks had been displaced and that the hold-down straps are not required for seismic restraint. This resolves the concern identified in the previous inspection report.

2. Drawing Control (IE Inspection Reports No. 050-358/75-03 and No. 050-358/75-01)

- a. The inspector reviewed a memo dated April 23, 1975, issued by the Kaiser Engineers, Incorporated (KEI) QA manager instructing all personnel regarding the procedure to be used for special requests of drawings. In addition, the inspector was informed that a training session relative to the special request drawing control was held on May 12, 1975, with the personnel on the memo distribution list attending. An audit was performed on June 3, 1975, to evaluate compliance (mistakes were identified that were corrected). The KEI QA manager said that further audits and surveillance activity will be conducted to assure adequate compliance. This matter is considered to be closed.

b. The inspector examined selected CSK drawings and determined that a new stamping system is now being used that identifies the field sketch drawings for construction use only. In addition, a sketch numbering system is now being utilized to further identify these drawings, and the alphanumeric numbering system was identified to the inspector as follows:

- SSK - Structural Sketches
- CSK - Civil Sketches
- PSK - Piping Sketches
- ISK - Instrumentation Sketches

This matter is considered to be closed.

3. Design Changes (IE Inspection Reports No. 050-358/75-03 and No. 050-358/75-01)

The S&L response to the licensee relative to a design revision error identified by NCR E-153 was issued on January 28, 1975. The licensee representative indicated that the response and action taken was considered to be adequate by CC&E QA. This matter is considered to be closed.

4. Procedure for Storage and Handling of Pipe (IE Inspection Reports No. 050-358/75-03 and No. 050-358/75-01)

KEI work instruction QACMI No. SM-3, Revision 1, was issued for review, comment, and approval at the time of the inspection. This instruction, including Appendix A "End Closure Requirements," appeared to provide adequate coverage and will resolve the concern when approved and issued.

Management Interview

A. The following persons attended a management interview held at the conclusion of the inspection.

Cincinnati Gas & Electric Company (CG&E)

- W. H. Dickhoner, President
- E. A. Borgmann, Vice President, Engineering
- E. C. Pandorf, Principal Quality Assurance and Standards Engineer

Kaiser Engineers Incorporated (KEI)

- W. F. Freidrich, Quality Assurance Manager - Site

B. Matters discussed and comments, on the part of management personnel, were as follows:

1. The inspector stated that the two infractions identified in the last inspection report would remain open pending further review since the action taken to resolve them is still in progress. The inspector added that it was his understanding that the I-R revised quality assurance manual and field installation manual review was to be completed by both S&L and CG&E. The licensee indicated that this was correct.
2. The inspector also indicated that the unresolved matters from the previous inspection appear to have been resolved satisfactorily.
3. The inspector stated that the principal inspector assignment for Zimmer was being transferred to T. E. Vandell and that further responsibility for NRC construction inspections and other activity would be carried out by him.
4. The licensee representatives were informed that a review was performed of the safety related coatings QA program, procedures, and specifications and that no apparent problem areas were identified.

## REPORT DETAILS

### Persons Contacted

The following persons, in addition to individuals listed under the Management Interview section of this report, were contacted during the inspection.

#### Cincinnati Gas and Electric Company (CG&E)

W. W. Schwiers, Field Project Engineer  
R. L. Wood, Quality Assurance and Standards Engineer  
R. P. Ehas, Quality Assurance and Standards Engineer

#### General Electric Company (GE) - Nuclear Energy Division

W. Crews, Site Manager

#### Kaiser Engineers, Incorporated (KEI)

H. R. Good, Inspection Supervisor  
M. G. Franchuk, Mechanical Quality Assurance Engineer  
W. A. Ferree, Superintendent - Warehousing  
M. H. Davis, Warehousing Supervisor

#### H. C. Nutting Company (Nutting)

A. J. Brucato, Laboratory Chief

#### Hilltop Concrete Corporation (Hilltop)

D. McKinley, Supervisor

#### Inland-Ryerson, Incorporated (I-R)

D. R. Rayka, Project Superintendent

### Results of Inspection

#### 1. Project Status

The inspector was informed that the Zimmer project is 30% completed. In addition, it was stated that approximately 50,000 cubic yards of concrete remain to be placed. The present activities include second-level work for the RHR area and painting also work is now beginning on the sacrificial shield. Presently, the fuel load date is April 1, 1978.

2. Coatings

The inspector reviewed the following specifications and instructions for coatings (painting) of Class I structures and components:

- a. Specification H-2174, Building Work for Wm. H. Zimmer Nuclear Power Station - Unit 1.
- b. Form 1791 - Standard Specification for Field Painting.
- c. Construction Inspection Plan.
- d. QA Manual, KEI.
- e. QA Program - Carboline.

The above specifications and instructions were found to comply with the appropriate recommendations and requirements of: (1) Regulatory Guide 1.54 "QA Requirements for Protective Coatings Applied to Water-Cooled Nuclear Power Plants, June 1973"; (2) ANSI N101.4 - 1972; (3) ANSI N101.2; (4) ANSI N5.12; (5) SSPC-PA 2-73T (Steel Structures Painting Council) dated September 1, 1973; (6) 10 CFR Part 50, Appendix B; and (7) Guidance on QA Requirements During the Construction Phase of Nuclear Power Plants, WASH-1309, dated May 10, 1974.

The QA program for receipt; materials verifications; materials storage; surface preparation; painters' qualifications; application of paint to concrete and steel surfaces; time, temperature, and humidity restrictions for both surfaces and materials; inspection; records and documentation; and final acceptance subsequent to completion of required painting were considered adequate for the licensee commitments.

3. Storage

The inspector observed the onsite storage of equipment and offsite storage of equipment at the BESL warehouse building located in Cincinnati. The KEI storage protection and inspection procedure (QACMI-G3) appeared to be in order. The inspection record cards were found to be available for inspection at the stored equipment sites. Access control to the storage areas was discussed with the utility representatives, with no problem areas being identified.

4. Audits

Reports of audits performed by CG&E QA personnel since the last IE inspection were reviewed by the inspector. The following site audits were conducted and were considered to be performed according to CG&E and KEI audit procedures.

- a. Maintenance of stored equipment.
- b. Painting and pipe hangers.
- c. Construction Inspection Plan AP-10 and 11  
(Surveillance of KEI Auditors)
- d. Bristol Steel Activities.
- e. Waldinger-Young & Bertke QA Program
- f. KEI Storage for Carbon Steel Piping.