

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-358/81-19

Docket No. 50-358

Licensee No. CPPR-88

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

Facility Name: Wm. H. Zimmer Nuclear Power Station

Inspection At: W. H. Zimmer, Moscow, OH

Inspection Conducted: June 29 and 30, July 1-3, 6-10, 13-17, 20-24,  
and 27-31, 1981

Inspectors: F. T. Daniels

*RC King for*

8-27-81

T. P. Gwyn

*RC King for*

8-27-81

Approved By: R. F. Warnick, Chief  
Reactor Projects Section 2B

*RC King for*

8-27-81

Inspection Summary

Inspection on June 29 and 30, July 1-3, 6-10, 13-17, 20-24, and 27-31, 1981  
(Report No. 50-358/81-19)

Areas Inspected: Routine resident inspection of Previously Identified Items, Followup on IE Bulletins and Circulars, Operating Staff Training, Preoperational Testing Procedure Review, Followup on Immediate Action Letter, and Plant Tours. This inspection involved a total of 179 inspector-hours onsite by two NRC inspectors, including 26 inspector-hours during offshifts.

Results: No items of noncompliance or deviations were noted.

## DETAILS

### 1. Personnel Contacted

J. R. Schott, Station Manager  
\*P. E. King, Assistant Station Superintendent  
\*H. R. Sager, QA Manager  
\*S. C. Swain, CG&E Construction Project Manager  
\*J. J. Wald, Station Quality Engineer  
J. C. Buck, CG&E Lead QA Auditor  
W. T. Gott, CG&E EPD Training Coordinator  
S. E. Martin, Professional Engineer  
B. Varchol, H. J. Kaiser Company QA Training Coordinator  
R. Ehas, CG&E Senior Quality Engineer  
and others of the station staff

\*Denotes those attending monthly exit interview.

### 2. Licensee Action on Previously Identified Items

(Closed) Unresolved Item (50-358/81-06-06): Complete retest of logic for VR exhaust fan IC.

The inspector verified that the required retest is being controlled under station work request No. 1346. Retest will be accomplished prior to closeout of this work request.

(Open) Unresolved Item (50-358/80-26-01): Errors between S&L Index, CG&E Index, C&ID's, and P&ID's.

The inspector verified that DDC SLM-638 made the required corrections to C&ID's per Items 4.a(4) and 4.a(5) of IE Inspection Report No. 50-358/80-26. In addition, some progress has been made toward resolving the concerns stated in Items 4.a(1), 4.a(2) and 4.a(3) of that report. The inspector will continue to follow this progress in future inspections.

(Open) Unresolved Item (50-358/81-07-05): Inadequate Review of PO-LP-01.

The inspector completed a review of PO-LP-01 as documented in IE Inspection Report No. 50-358/81-12. In addition, the inspector attended the Station Review Board session which approved this procedure for testing. Furthermore, Procedure SU.ACP.07, Qualifications of Preop and Startup Test Personnel, has been revised to include qualification requirements for Technical Staff Engineers and SRB subcommittee members who review preoperational test procedures and results. The inspector will continue to monitor the performance of the station review board and its subcommittee members, especially as preoperational testing results packages come under review.

(Open) Noncompliance (50-358/81-07-07): Inadequate design review of DDC WYB-563.

The inspector verified that drawing revisions have been completed to correct the identified problem; that a review of all HVAC DDC's by the HVAC contractor (WYB) has been completed and turned over to H. J. Kaiser Company personnel for action; that an audit of WYB DDC activities was conducted by WYB QA and that appropriate corrective action is pending on identified deficiencies; and that training was conducted for WYB personnel concerning the correct procedures for documenting field changes. The inspector observed that past problems with WYB DDC's have been identified but were still pending corrective action at the time of this inspection. This item of noncompliance remains open pending completion of corrective action and NRC verification of corrective action taken at the Architect Engineer (Sargent and Lundy).

(Closed) Unresolved Item (50-358/81-07-03): Various requirements of Rad/Chem Group T&M Program were not being followed.

The inspector verified that the noted problems have been corrected.

(Closed) Unresolved Item (50-358/81-07-02): Various requirements of Maintenance Group T&M Program were not being followed.

The inspector verified that the noted problems have been corrected.

(Closed) Unresolved Item (50-358/81-15-11): Ten Copies of DDC S-2602 in the field without register number.

The licensee has taken appropriate action which should preclude recurrence of this problem.

(Closed) Noncompliance (50-358/81-15-09): Failure to follow Procedures SU.PRP.12 and QA.SAD.07.

The inspector verified that SU.PRP.12, Tagging of Systems Turned Over For Preoperational Testing, was revised effective July 9, 1981 to allow I&C technicians to hang green jurisdictional tags; that the I&C foremen were instructed as to the requirements of SU.PRP.12 by the I&C Supervisor; and that appropriate retraining was supplied to QC personnel who review station work requests concerning QC requirements for non-routine maintenance activities. This action was completed well in advance of the commitment date.

(Closed) Unresolved Item (50-358/81-12-01): Untimely Response to Noncompliance 79-39-02.

Licensee response to Noncompliance 81-12-01 and the original Item 79-39-02 will resolve the concern of this item.

### 3. IE Bulletin Followup

For the IE Bulletins listed below the inspector verified that the written response was within the time period stated in the bulletin, that the written response included the information required to be reported, that the written response included adequate corrective

action commitments based on information presented in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

(Closed) IE Bulletin No. 80-25: Operating Problems With Target Rock Safety Relief Valves At BWR's.

(Closed) IE Bulletin No. 81-02: Failure of Gate Type Valves To Close Against Differential Pressure.

The licensee has determined that none of the affected valves are applicable to the Zimmer Project.

4. IE Circular Followup

For the IE Circular listed below, the inspector verified that the circular was received by the licensee management, that a review for applicability was performed, and that if the circular was applicable to the facility, appropriate corrective actions were taken or were scheduled to be taken.

(Closed) IE Circular No. 80-05: Emergency Diesel-Generator Lubricating Oil Addition And Onsite Supply.

5. Operating Staff Training

The inspector attended two training sessions, conducted by the training group, to verify that the instruction received was adequate to meet the objectives of the lesson plan. The inspector reviewed the training records of six individuals in different job classifications and conducted personal interviews of those individuals to verify that the initial training program was fully implemented and that training records accurately reflected training received. The inspector also reviewed actions taken to correct problem areas identified during the 1980 Systematic Assessment of Licensee Performance (SALP).

a. Documents Reviewed

- (1) Balance of Plant Lesson Plan for the Makeup System.
- (2) Steam Turbine-Generator Operation Training Program.
- (3) Training Records for:
  - (a) STA Candidate
  - (b) Two NPO Trainees
  - (c) Training Coordinator
  - (d) Two Rad Chem Technicians

b. Training Sessions Attended

- (1) Makeup System for STA Candidates and Rad Chem Technicians.
- (2) General Description of Turbine for SRO's and RO's.

c. Findings

- (1) The format for training records had not been finalized at the time of this inspection. However, all required information was either contained in the record package or was in the process of being filed.
- (2) The lesson plans being used to instruct personnel on the Balance of Plant Systems were, in some cases, not of the appropriate format to be used in the training of STA's. (i.e., They were essentially a rewrite of the system operating procedure.) The instructor recognized this and was able to present an adequate lecture based upon personal notes.
- (3) Several individuals interviewed were concerned that the Lesson Plans and/or system descriptions used for lectures and study purposes were incomplete, inaccurate.

The inspector found that the system descriptions were general in nature, lacked specific detail, and were out-of-date. This was discussed with the Training Coordinator who stated they were going to be eliminated when the Lesson Plans were revised. Also the Training Coordinator stated that due to lack of adequate training staff the Lesson Plans have not been totally revised and as soon as the staff is acquired they will be revised.

The revising of Lesson Plans is considered an unresolved item and will be reinspected during future inspections. (50-358/81-19-01).

- (4) The training group was still undermanned, although the necessary training required was being conducted by contract personnel and offshift SRO candidates. It was brought to the licensee's attention that this would be inadequate when the training required just prior to fuel load and during operation was commenced. The licensee agreed and stated requisitions were open for five more full time instructors, but at present only one instructor had been hired. (This did not increase the staff size, since the only full time instructor the licensee had prior to hiring the new one quit in June 1981.) This is considered an unresolved item and will be followed up during subsequent inspections. (50-358/81-19-02)

- (5) The administrative procedures for the training group (TR.SAD's) and their implementing procedures still have not been completed. Some progress has been made with TR.SAD's, but no implementing procedures have been written. This was discussed with the Training Coordinator who stated procedures will be written as personnel become available. This item is considered to be unresolved and will be followed up in subsequent inspections. (50-358/81-19-03)

No items of noncompliance or deviations were noted.

6. Preoperational Testing Procedure Review

The inspector reviewed Residual Heat Removal (RH) Preoperational Test Procedure (PO-RH-01, Revision 2) to verify its technical and administrative adequacy.

a. Inspections Conducted

- (1) The following administrative requirements were reviewed:

- (a) Management review and approval
- (b) Proper format
- (c) Test objectives clearly stated
- (d) Pertinent prerequisites identified
- (e) Acceptance criteria clearly identified
- (f) Initial test condition specified
- (g) Provisions available for documenting all items conducted

- (2) The following technical aspects were reviewed:

- (a) Step-by-step instructions for the performance of the preoperational procedure were complete to the extent necessary to assure that test objectives were met.
- (b) The valve, instrument and electrical breaker appendices were accurate and complete.

b. Findings

- (1) The Test Objectives (Section 1) did not contain a statement which reflected the commitment made in the FSAR, Table 14.1-6, "To demonstrate and evaluate, to the extent possible, the RH System operational procedures."
- (2) The following instruments were not listed in the preoperational test instrument table:
  - (a) 1E12-N004A and 4B - Hx Inlet Temp.
  - (b) 1E12-N005A and 5B - Service Water Outlet
  - (c) 1E12-N031 - Hx Outlet to Waste Surge Tank



- (3) Valve 1E12-F004 - LPCI Suction - was not listed in the valve differential pressure data sheet (9.14B) as required by Design Specifications.

The above three findings were corrected immediately by the System Engineer by implementing Temporary Change Notices.

- (4) The Residual Heat Removal System Design Specification (GE Specification 22A2817, Revision 3) and the system operating procedure (OP.RH. 01, Revision 3) require that the condensate temperature from the RH heat exchangers (in the steam condensing mode) be less than 140°F to prevent damage to the RCIC pump and turbine bearings. As presently installed, it appears that there is not sufficient instrumentation available to allow the operator to monitor the condensate temperature and thus verify this requirement is met. This item is unresolved and will be followed up during subsequent inspection (50-358/81-19-04).

No items of noncompliance or deviations were noted.

7. Followup on Immediate Action Letter (IAL) dated April 8, 1981

The inspectors reviewed the licensee's progress in the implementation of the various requirements imposed by the IAL. The results of the inspection were:

a. Item 1 - Concerning QA Staffing

The CG&E QA Staff was only two individuals short of the projected necessary staffing level. These individuals will be employed as auditors in order to fully implement the audit and surveillance program. The NDE/Level III QA Engineer is still a contractor employee; therefore, it still is necessary for CG&E to employ a NDE/Level III QA Engineer as a permanent CG&E Employee. The CG&E QA staff (including contracted individuals) is now approximately 75.

b. Item 3 - Concerning QC Inspections

The CG&E QC inspection staff was sufficiently staffed to perform the required reinspections. The CG&E employees being used as construction QC inspectors have returned to their inspection duties in the Operations Department. Therefore, all of the QC inspectors in the CG&E construction inspector group, except the group supervisor, are contract individuals.

This leaves the licensee with eight qualified inspectors to acquire as permanent CG&E employees.

c. Item 4 - Concerning QC Inspection Procedures

The technical review of all QA/QC procedures was in progress by CG&E and H. J. Kaiser Company. This review has progressed slowly due to the work load, but was showing a definite improvement in the procedures.

The Region III USNRC Technical Staff will continue to provide a further review of some of the procedures.

d. Item 5 - Concerning Training

The inspector confirmed that both the CG&E and H. J. Kaiser Company QA training programs continued to be implemented as previously described (Reference IE Inspection Reports No. 50-358/81-15, 50-358/81-18). The inspector noted that to date no formal training program has been established for CG&E's three permanent staff quality engineers. The licensee stated that plans are being formulated for their training.

e. Item 8 - Concerning QA/QC Records

Substantial progress was noted in this area during the past month. The new records storage facility has been virtually completed and the transfer of records to the new facility has begun. The licensee was in the final review process on an overall controlling procedure (OPP-5.1, Verification and Site Integration of Documents For Final System Acceptance) for assembly and review of construction QA record packages. The H. J. Kaiser Company has developed and was in the final review process on a number of implementing procedures to facilitate document handling and review. The General Physics Corporation has presented a program which would produce matrices specifying documentation required to ensure that QA record packages are complete. The licensee stated that review of QA/QC records should begin within the next month, and that there would be approximately 50 persons involved in the overall record handling and review operations. In addition, the licensee was in the final review process on a new Procedure OPP-2.3, NRC Inspection Reports, Bulletins, Circulars, and Information Notices, Correspondence and Commitment Control) which will administer their commitment control program.

f. Item 9 - Concerning Conditions Adverse to Quality

The inspector verified that all Nonconformance and Surveillance Reports issued by H. J. Kaiser QA/QC group are being reviewed by a CG&E Quality Engineer as they are issued. Surveillance Reports are reviewed in accordance with Procedure 10-QA-06, Review of Surveillance Reports, and Nonconformance Reports are reviewed in accordance with Procedure 15-QA-03, Review of Nonconformance Reports. (Note: The number/letter designator for Review of Nonconformance Reports was revised from 05-QA-01 in May 1981 to 15-QA-03 in July 1981).



g. Item 10 - Concerning the Audit Program

The surveillance program to audit construction activities was still in the developmental stages and in the interim the 100% reinspection of construction activities was continuing.

No items of noncompliance or deviations were noted.

8. Plant Tours

The inspectors conducted frequent plant tours throughout this inspection period. The below listed items were identified and the licensee is taking or has taken appropriate corrective action:

- a. Fuse 1E22A-F3 in panel 1H13-P625 was blown.
- b. The reactor water cleanup nonregenerative heat exchanger, 1G33-B002A, which was turned over for preoperational testing, was noted to have a loose (less than hand tight) anchor nut at the base plate anchor point (north end).
- c. Valves 1E12-F053A and B appeared to have packing leaks. (RHR system containment isolation valves).
- d. In Essential Switchgear Room 'C', the inspector observed many empty beer cans, an empty gin bottle, other bottles, paper trash, and miscellaneous hardware piled next to a 4160 VAC essential switchgear panel (ESS Division III).

9. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. Four unresolved items disclosed during this inspection are discussed in Paragraphs 5.c(3), 5.c(4), 5.c(5), and 6.b(4).

10. Management Exit Interview

The inspectors met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on July 31, 1981. The inspectors summarized the scope and findings of the inspection.