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

REGION III

Report No. 50-358/80-21

Ducket No. 50-358

License No. CPPR-88

10-20-80

10-20-80

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

Facility Name: W. H. Zimmer Nuclear Power Station

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

Inspection Conducted: September 2-5, 8-10, 15-19, 22-26, 1980

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Inspectors: F. T. Daniels

RFW For

T. P. Gwynn

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Approved By: R. F. Warnick, Chief Projects Section 3

Inspection Summary

Inspection on September 2-5, 8-10, 15-19, 22-26, 1980 (Report No. 50-358/80-21) Areas Inspected: Routine resident inspection of Previously Identified Items, IE Bulletin and Circular Followup, Fire Prevention/Protection, Preoperational Testing Quality Assurance, Radiation Protection Preoperational, Special Test Witnessing, and Plant Tours. The inspection involved a total of 160 inspector-hours onsite by two NRC Resident Inspectors including 21 inspector-hours onsite during off-shifts.

Results: No items of noncompliance or deviations were noted.

DETAILS

1. Persons Contacted

*J. R. Schott, Plant Superintendent
*P. E. King, Assistant Plant Superintendent
*W. W. Schwiers, Quality Assurance Manager
R. P. Ehas, Senior Quality Engineer
C. A. Burgess, Electrical Quality Engineer
R. W. Link, Operations Supervisor
J. J. Wald, Station Quality Engineer
W. E. Craig, Assistant Station Quality Engineer
G. Strong, System Engineer
and others of the station staff

*Denotes those who attended monthly exit meeting.

2. Licensee Action on Previously Identified Items

(Closed) Review of equipment inside containment for Manual Operation.

The inspector requested a review be performed to insure the Wm. H. Zimmer Nuclear Power Station did not have electrical breakers inside the Primary Containment used to supply valves that might need to be energized prior to operation (shutting of a locked open breaker). It was determined there are no electrical breakers inside containment, therefore the station is in compliance with the NRR Technical Position concerning the location of load centers to locations outside containment.

(Closed) Noncompliance Item 80-07-07 The inspector verified that training classes were conducted and the revision to QACMI E-16 procedure was completed.

(Closed) Unresolved Item 79-06-01 The inspector verified that the 1B 125 VDC Battery Cell #84 was replaced by Work Request #00395 and cell #88 was replaced by Work Request #00695.

(Closed) 10 CFR 50.55(e) Reportable Deficiency on Ruskin Fire Dampers The inspector verified that rework was performed by Ruskin Manufacturing Company as per Field Rework Plan #0053.

(Closed) 10 CFR 50.55(e) Reportable Deficiency on Gould-Brown-Boveri Motor Control Center The inspector reviewed documentation and verified that combustible material was removed and Gould-Brown-Boveri concurred as to action taken to cor: the deficiency. (Closed) Unresolved Item 79-36-01 The inspector verified a tracking system for recommended changes to operating procedures was established and is being followed.

(Closed) Unresolved Item 80-04-04 The inspector verified that an Essential Equipment Status Log had been implemented and is being followed.

No items of noncompliance or deviations were noted.

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 presentation 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.

Bulletin 80-19,	80-19 and Rev. 1	Failure of Mercury Wetted Relays in RPS Systems.
Bulletin	80-20	Failure of Westinghouse Type W-2 Spring Return to Neutral Control Switches

No items of noncompliance or deviations were noted.

4. IE Circular Followup

For the IE Circulars 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 were applicable to the facility, appropriate corrective actions were taken or were scheduled to be taken.

Circular 79-07,	Unexpected Speed Increase of Reactor Recirculation Motor Generator Set Resulting in Reactor Power Increase
Circular 79-22,	Stroke Times for Power Operated Relief Valves
Circular 79-23,	Motor Starters and Contactors Failed to Operate

Circular 80-09,

Problems with Plant Internal Communications Systems.

No items of noncompliance or deviations were noted.

5. Fire Prevention/Protection

The inspector verified by observation and document review that a quality assurance verification was performed to confirm that fire sealing material is not flammable; that results of fire inspections performed by the licensee and insurance inspectors were reviewed, and where inspection findings involved fire hazards in vital areas appropriate corrective action has been taken or planned; and by actual inspection that fire fighting equipment in the control room, cable spreading room, and switchgear rooms A, B, and C were operational. (Note: Only construction phase firefighting equipment is installed since these areas were not turned over to Electrical Production Department).

a. Documentation Reviewed

- (1) OP. FPP.16-510AB, Fire Preplan for Switchgear Room C.
- (2) OP. FPP.25-525AB, Fire Preplan for Switchgear Room B.
- (3) OP. FFP. 42-546AB, Fire Preplan for Switchgear Room A.
- (4) American Nuclear Insurers Loss Prevention Reports, N-184, dated October 1978 and February 1979.
- (5) CG&E Field Audit Report Number 326 dated August 29, 1980.

b. Findings

 Fire preplan floor plans do not accurately reflect locations of firefighting equipment available during construction of station, although they were issued for use by the operating personnel.

Training was being conducted during September and it was brought out that these plans will not be correct until the specified area is turned over to the Electrical Production Department.

- (2) The placing of carbon dioxide extinguishers (when the area is turned over to the Electrical Production Department) as per the fire preplan floor plans will be inadequate as listed below:
 - "A" switchgear west wall next to RLC-22. The extinguisher would be blocked by risers R2015 and R2016.
 - "A" switchgear north wall next to panel 1PLB5J and door 166. There isn't any space to hang extinguisher between the aforementioned panel and door.

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- "B" switchgear. There isn't any place to hang extinguisher in front of panel IDC13E.
- "B" switchgear on block wall between battery room and switchgear. Locating extinguisher in this location would impede access between air handling unit and battery room wall.
- "C" switchgear. Floor plan shows the extinguisher located inside "C" battery room vice on blockwall outside battery room.
- The licensee committed to reevaluate their fire preplans to insure they reflect as installed conditions, what revisions are necessary to assure accessibility, and whether firefighting equipment can be located as reflected in the preplans. This is considered an unresolved item (50-358/80-21-01) and will be reviewed in subsequent inspections.

No items of noncompliance or deviation were noted.

6. Preoperational Testing Quality Assurance

a. QA Surveillance and Inspection

The inspector verified that requirements have been established, responsibilities assigned, and procedures or checklists developed for the Electrical Production Department Quality Assurance Group to review and monitor the following activities on a regular basis:

- (1) Conduct of testing
- (2) Tracking of test deficiencies
- (3) Test documentation
- (4) Document control
- (5) Control of measuring and test equipment
- (6) Cleanliness control
- (7) Field changes and modifications
- (8) Maintenance during preoperational testing
- (9) QA records

In addition, the inspector verified that requirements have been established, responsibilities assigned, and procedures written for assuring that corrective actions are taken for deficiencies identified during inspections or surveillances.

b. Audit

The inspector verified that subject areas to be audited and audit schedules have been defined, that administrative channels have been defined for taking corrective actions when deficiencies are identified during audits, that requirements have been defined to require independence of audit personnel, that distribution requirements for audit reports have been defined and that responsibilities have been assigned in writing for the following:

- (1) Overall management of the audit program
- (2) Approving audit procedures
- (3) Determining the adequacy of the qualifications of audit personnel
- (+) Determining the need for special training for audit personnel
- (5) Assuring corrective actions are taken for deficiencies identified during audits
- (6) Determining when reaudits are required
- (7) Issuance of audit reports to management
- (8) Periodic review of the audit program to determine its status and adequacy

c. Training and Qualification of QA Personnel

The inspector verified that a training program has been established and responsibilities assigned in writing for training of QA auditors and inspectors in overall company policies, procedures, and instructions which establish and implement the QA program.

The inspector verified by review of established administrative controls, including job descriptions, that minimum educational experience or qualification requirements have been established in writing and are being accomplished for the following positions:

- (1) Onsite QA Supervisor
- (2) QA Inspectors
- (3) QA Auditors

d. Documentation Reviewed

- QA.SAD.01, Quality Assurance, Rev. 03, dated August 27, 1980
- (2) QA.SAD.02, Station Audits, Rev. 04, dated May 21, 1980
- (3) QA.SAD.03, Quality Assurance Status Reporting Rev. 00, dated September 26, 1978
- (4) QA.SAD.05, Quality Assurance Program for Preoperational Testing, Rev. 00, dated September 27, 1978

- (5) QA.SAD.06, Nonconformance Reporting, Rev. 02, dated October 8, 1979
- (6) QA-SAD.07. Operational QC Inspection Program, Rev. 02, dated May 14, 1980
- (7) QA.SAD.08, QA/QC Personnel Qualifications Requirements, Rev. 00, dated May 21, 1979
- (8) QD.QAI01, Review and Inspection of Preoperational Tests, Rev. 01, dated September 27, 1978
- (9) QD.QAI.02, Conduct of Station Audits, Rev. 04, dated February 5, 1979
- (10) QD.QAI.06, Surveillance Inspections, Rev. 00, dated September 27, 1978
- (11) QD.QAI.14, Conduct of QC Inspections, Rev. 01, dated March 10, 1980
- (12) CG&E Audit, SU.TG.11, dated March 20, 1980 and the responses, thereto
- (13) CG&E Electrical Production Department QA Group Surveillance Reports SU-11 through SU-21
- (14) Corrective Action Report Number 80-01
- (15) Qualification Records of 2 lead Auditors, 1 Auditor, and 2 QC Inspectors
- (16) Job Descriptions for Junior QC Technician, QC Technician, Assistant QA Engineer, and QA Engineer
- e. Findings
 - (1) A revision to "QA/QC Personnel Qualifications Requirements" procedure QA.SAD.08 is required to meet the certification of auditors as per ANSI N45.2.23. The licensee committed to revising the procedure. This is considered an unresolved item (50-358/80-21-02) and will be followed up in subsequent inspections.
 - (2) Various clerical errors were noted in the surveillance reports of the preoperational program. These were corrected by the Station Quality Engineer.

No items of noncompliance or deviation were noted.

7. Radiation Protection Preoperational

The inspector verified through direct observation and document review that appropriate levels of radiation protection training are being received by station personnel and contractor employees, and that training records are being kept and maintained for all personnel trained in accordance with applicable station instructions and regulatory guidance. The inspector verified through direct observation and document review that training materials and instructions pertaining to radiation protection are adequate, consistent with regulatory guidance.

The inspector verified through direct observation and document review that training materials and instructions pertaining to radiation protection are adequate, consistent with regulatory guidance and FSAR commitments.

a. Documentation Reviewed

- (1) TR.SAD.01, Rev. 00, Station Training Program
- (2) RP.SAD.01, Rev. 00, Radiation Protection Program
- (3) RC.RPP.1.109, Rev. 01, Instruction Concerning Prenatal
- Radiation Exposure for Female Employees
- (4) Radiation Protection Orientation Lesson Plan
- (5) Radiation Protection Manual Course Lesson Plan

b. Findings

(1) The initial radiation protection training program for station personnel is more than adequate. However, station training instructions and the FSAR also require an annual radiation protection refresher course for all station personnel which has not yet been documented or implemented. This is considered to be an unresolved item (50-358/80-21-03) and will be followed up in a future inspection.

No items of noncompliance or deviation were noted.

8. Special Test Witnessing - 250VDC Test

The inspector witnessed preparations for and partial performance of the special test procedure SU.SP.15, Rev. 0, 250VDC test, which is a special test of the station 250VDC battery and associated battery charging equipment. During test performance, the inspector verified that the latest revision of the test procedure was in use; that minimum personnel requirements were met; that all necessary systems were in service with all prerequisites met; that special test equipment used for data gathering was properly calibrated and in service; that a record of significant events, unusual conditions, and test discrepancies was kept; that the crew performance was adequate to safely conduct the test; and that all data were collected by the proper personnel.

In addition, the inspector verified by document review that procedure review and approval were in accordance with administrative controls; that the battery vendors manual was current; and that the training records of maintenance personnel involved in the test reflected appropriate training in the area of administrative controls for testing and QA/QC.

- a. Documentation Reviewed
 - SU.SP.15, Rev. 0, 250VDC Test
 - PT.DC.01, Rev. 0, Jurisdiction Green Tagging for Preoperational Testing, 250VDC Distribution System
 - Gould Instruction Manual, Storage Batteries
 - EC.SAD.02, Rev. 04, Jumper and Lifted Wire Control
 - SU.ACP.17, Rev. 03, Special Tests
 - Station Training Records for (4) Maintenance Department Personnel
 - ME.CMP.2.15, Rev. 01, Battery Terminal Cleaning

b. Findings

(1) Procedure SU.ACP.17 requires that the cognizant group supervisor approve the commencement of testing, and signify this approval via his signature on the test cover sheet. During performance of the test, the inspector noted that this required approval signature did not appear on the "Official" copy of the test procedure.

Subsequent discussion with the system engineer revealed that the cognizant group supervisor had in fact approved the test; however, his signature had not been obtained on the test cover sheet. This omission was corrected.

- (2) The inspector questioned the use of an appendix (10B) to the test procedure which he considered inappropriate. The inspector pointed out that the use of this appendix on a fully charged battery cell could potentially pose a hazard to equipment and personnel. In addition, the inspector questioned the control of battery terminal jumpers. Both these concerns were satisfied by the issuance of a test change notice to the detailed procedure delineating the appropriate actions to be taken and providing for control of battery terminal jumpers.
- (3) During initial readings of cell specific gravities, the inspector noted that the spacers, which are part of the battery seismic restraint, were missing around cell #26 of the 250VDC battery. This item was brought to the attention of the maintenance supervisor for his resolution.
- (4) 250VDC battery charger IDC02EA was not green tagged. Review of the 250VDC system turnover for peroperational testing revealed that tag #01012 was assigned. This missing tag was brought to the attention of the turnover group.

(5) Although several of the maintenance technicians involved in the test performance stated that they had received related technical and on-the-job training pertaining to the station batteries, this training was not reflected in the station training records.

9. Plant Tour

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The inspector conducted frequent plant tours throughout this inspection reporting period. The following items were identified and the licensee is taking or has taken appropriate corrective action.

- a. Two conduits, in the Reactor Building above RXMCC 1B, grounding straps were not terminated into a cable tray properly (per S&L STD EB-146). The conduits contained cables NR479 and RP084-087.
- b. Temporary scaffold platform in the Reactor Building, above RXMCC 1B, was using safety related cable trays as its foundation.
- c. The inspector found an associated cable, #LD098, which had been improperly identified by its mylar tags as an essential (yellow) cable. The cable had been inspected by QC and the cable pull card had been stamped by the QC inspector which signified the marking was adequate and correct.

10. 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. Unresolved items disclosed during the inspection are discussed in paragraphs 5.b, 6.e, and 7.b.

11. Monthly Exit Meeting

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on September 26, 1980. The inspector summarized the scope and findings of the inspection.